

#### Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon Governor

Lori F. Kaplan Commissioner

100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.state.in.us/idem

# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) RENEWAL OFFICE OF AIR QUALITY

## Four Winds International, Inc. 701 County Road 15 Elkhart, Indiana 46515-1486

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F039-14036-00220

Issued by:Original signed by Paul Dubenetzky

Paul Dubenetzky, Branch Chief

Office of Air Quality

Issuance Date: January 7, 2003

Expiration Date: January 7, 2008

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Four Winds International, Inc. Elkhart, Indiana

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#### SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

#### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary motor home/recreational vehicle manufacturing source.

Authorized Individual: Jeff Kime, President

Source Address: 701 County Road 15, Elkhart, Indiana 46515-1486
Mailing Address: P.O. Box 1486, Elkhart, Indiana 46515-1486

General Source Phone: (574) 266-1111

SIC Code: 3716 County Location: Elkhart

County Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

#### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

Three (3) motor home product lines as follows:

- (a) One (1) Class C Line, producing a maximum of 2.5 units per hour, installed in January 1992, consisting of the following:
  - (1) Sub-assembly area coating operations, identified as CSA-1, consisting of:
    - (A) hand, roll, bead, aerosol, high volume low pressure (HVLP) spray, and cup gun spray application of miscellaneous coatings and adhesives applied to metal, wood construction materials, pre-finished wood cabinets and counter tops, plastic, and fiberglass product parts during motor home assembly, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.

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(2) Final finish area coating operations, identified as CFF, consisting of:

- (A) hand, aerosol, cup gun spray, and pressure pot spray application of miscellaneous coatings applied to metal, wood construction materials, pre-fabricated cabinets and counter tops, and fiberglass parts during motor home finishing and touch-up, with emissions exhausting fugitively into the building; and
- (B) hand and aerosol application of miscellaneous solvents and cleaners.
- (3) Metal frame undercoating spray application area, identified as CUA, with emissions exhausting fugitively into the building.
- (4) Sub-assembly area woodworking operations, identified as CSA-2, using 1,267 pounds of wood per hour, with particulate matter emissions controlled by one (1) cyclone with bag dust collector exhausting within the building and one (1) cyclone dust collector exhausting to the atmosphere.
- (b) One (1) Class A Line 1, producing a maximum of 2 units per hour, installed in June 1999, consisting of the following:
  - (1) Sub-assembly area coating operations, identified as A1SA, consisting of:
    - (A) hand, roll, bead, aerosol, high volume low pressure (HVLP) spray and airless spray application of miscellaneous coatings and adhesives applied to metal, wood construction materials, pre-finished wood cabinets and counter tops, plastic, and fiberglass product parts during motor home assembly, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.
  - (2) Final finish area coating operations, identified as A1FF, consisting of:
    - (A) hand, aerosol, high volume low pressure (HVLP) spray, and airless spray application of miscellaneous coatings applied to metal, wood construction materials, pre-fabricated cabinets and counter tops, and fiberglass parts during motor home finishing and touch-up, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.
  - (3) Sub-assembly area production operations, including foam insulation cutting and woodworking operations for both Class A Lines 1 and 2, identified as ASA, using 300 pounds of foam insulation and 1,460 pounds of wood per hour, with particulate matter emissions controlled by two (2) cyclones and bag filter, identified as C3, exhausting within the building.

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(c) One (1) Class A - Line 2 (Diesel Pusher Production Line), producing a maximum of 0.375 units per hour, installed in 2002, consisting of the following:

- (1) Sub-assembly area coating operations, identified as A2SA, consisting of:
  - (A) hand, roll, bead and aerosol application of miscellaneous coatings and adhesives applied to metal, wood construction materials, pre-finished wood cabinets and counter tops, plastic, and fiberglass product parts during motor home assembly, with emissions exhausting fugitively into the building; and
  - (B) hand and aerosol application of miscellaneous solvents and cleaners.
- (2) Final finish area coating operations, identified as A2FF, consisting of:
  - (A) hand and aerosol application of miscellaneous coatings applied to metal, wood construction materials, pre-fabricated cabinets and counter tops, and fiberglass parts during motor home finishing and touch-up, with emissions exhausting fugitively into the building; and
  - (B) hand and aerosol application of miscellaneous solvents and cleaners.
- A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas fired combustion units with heat input capacities equal to or less than ten million (10,000,000) BTU per hour, itemized as follows:
  - (1) Building 650 includes twenty-five (25) 0.10 MMBtu per hour infrared tube heaters, four (4) 0.4 MMBtu per hour thermo cyclers, five (5) 0.3 MMBtu per hour gas fired unit furnaces, one (1) 0.4 MMBtu per hour air make up gas fired furnace, one (1) 2.64 MMBtu per hour air make up gas fired furnace, one (1) 0.15 MMBtu per hour barrel gas fired furnace, one (1) 0.1 MMBtu per hour gas fired unit furnace, three (3) 0.25 MMBtu per hour gas fired unit furnaces, one (1) 0.33 MMBtu per hour gas fired unit furnaces, and two (2) 0.35 MMBtu per hour gas fired unit furnaces.
  - (2) Building 651 includes one (1) 0.13 MMBtu per hour down draft gas fired furnace, three (3) 0.1 MMBtu per hour gas fired furnaces, and one (1) 0.24 MMBtu per hour gas fired furnace.
  - (3) Building 653 includes one (1) 0.12 MMBtu per hour down draft gas fired furnace, one (1) 0.4 MMBtu per hour thermo cycler, two (2) 0.12 MMBtu per hour infrared tube heaters, and one (1) 1.0 MMBtu per hour air make up gas fired furnace.

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(4) Building 654 includes two (2) 0.55 MMBtu per hour air make up gas fired furnaces, eleven (11) 0.12 MMBtu per hour infrared tube heaters, four (4) 0.4

MMBtu per hour thermo cyclers, one (1) 0.49 MMBtu per hour air make up gas fired furnace, one (1) 0.03 MMBtu per hour gas fired unit furnace, two (2) 0.06 MMBtu per hour gas fired unit furnaces, and one (1) 0.1 MMBtu per hour gas fired unit furnace.

(b) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10.500 gallons:

- (c) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs;
- (d) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs;
- (e) Paved and unpaved roads and parking lots with public access;
- (f) The following VOC and HAP storage containers:

Vessels storing lubricating oils, hydraulic oils, machining oils and machining fluids;

- (g) Application of oils, greases, lubricants or other non-volatile materials applied as temporary protective coatings;
- (h) Cleaners and solvents characterized as:

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- (1) Having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38EC (100EF) or;
- (2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (i) Emergency generators as follows:

Reciprocating engines not exceeding 16,000 horsepower, consisting of:

- (1) one (1) 144 hp natural gas fired reciprocating engine; and
- (2) one (1) 80 hp natural gas fired reciprocating engine.
- (j) Other activities and categories with PM/PM10 emissions below the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day:
  - (1) miscellaneous woodworking at Class A Line 1 subassembly, using 425 pounds of wood per hour, exhausting fugitively within the building;

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(2) hand routing at Class A - Line 1, using up to 500 pounds of prefabricated fiberglass reinforced plastic (FRP) parts per hour, utilizing a cyclone (C4) as particulate matter control and exhausting within the building.

- (3) steel and aluminum tube plasma/torch cutting and welding at Class C Line, using a maximum of 75 pounds of welding wire per hour and exhausting within the building;
- (4) steel and aluminum tube plasma/torch cutting and welding at Class A Line 1, using a maximum of 75 pounds of welding wire per hour and exhausting within the building; and
- (5) wood trim cutting at Class A Line 1 final finish area, using up to 10 pounds of wood per hour, utilizing a cyclone with bag filter (C3) as particulate control and exhausting within the building.
- (k) Other activities and categories with negligible PM/PM10 emissions:
  - (1) steel and aluminum tube cutting at Class A Line 1, respectively sawing up to 63 and 130 linear feet per hour at an average thickness less than one (1) inch, with deposition of metal shavings in the building; and
  - (2) seven (7) portable dust collectors, as a trivial activity, used at this source to control particulate matter emissions from the facilities and activities listed herein.
- (I) Application of miscellaneous solvents and cleaners for maintenance at the Class C, Class A Line 1, and Class A Line 2 product line buildings, with VOC emissions below the insignificant thresholds of three (3) pounds per hour or 15 pounds per day.

#### A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

#### A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
  - (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

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#### **SECTION B**

#### **GENERAL CONDITIONS**

#### B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

#### B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

#### B.3 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

#### B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

#### B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

#### B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

#### B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

## B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(c) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

#### B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ, may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; and
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

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B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
  - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions: and

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(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee may use documents prepared pursuant to other condition(s) of this permit to satisfy this PMP requirement. Upon request, the Permittee shall provide IDEM, OAQ clear reference and access to other documents used to satisfy this PMP requirement.

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

#### B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and the IDEM Northern Regional Office, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance

Section) or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

Telephone No.: 1-800-753-5519 (IDEM Northern Regional Office) Facsimile No.: 219-245-4877 (IDEM Northern Regional Office)

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

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(g) Operations may continue during an emergency only if the following conditions are met:

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- (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
  - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
  - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

#### B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

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3.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination

[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]
  - (1) A timely renewal application is one that is:

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(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9] If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

#### B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

#### B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;

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(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions):
- (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) Emission Trades [326 IAC 2-8-15(c)]
  The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]

  The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

#### B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

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#### B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

#### B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

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B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4320 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

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#### SECTION C

#### SOURCE OPERATION CONDITIONS

#### **Entire Source**

#### Emissions Limitations and Standards [326 IAC 2-8-4(1)]

#### C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

- (a) Pursuant to 326 IAC 2-8:
  - (1) The potential to emit any regulated pollutant from the entire source, except particulate matter (PM), shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;
  - (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
  - (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.
- (c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.
- (d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.
- C.2 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P] [326 IAC 6-3-2]
  - (a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
  - (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

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#### C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

#### C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

#### C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

#### C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

#### C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

#### C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

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(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

- (2) If there is a change in the following:
  - (A) Asbestos removal or demolition start date;
  - (B) Removal or demolition contractor; or
  - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control
  The Permittee shall comply with the applicable emission control procedures in 326 IAC
  14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are
  applicable for any removal or disturbance of RACM greater than three (3) linear feet on
  pipes or three (3) square feet on any other facility components or a total of at least 0.75
  cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
  The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
  prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
  thoroughly inspect the affected portion of the facility for the presence of asbestos. The
  requirement that the inspector be accredited is federally enforceable.

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#### Testing Requirements [326 IAC 2-8-4(3)]

#### C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ, not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### Compliance Requirements [326 IAC 2-1.1-11]

#### C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented upon issuance of this permit. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

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#### C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

#### Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

## C.15 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ, upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
  - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

The Permittee may use documents prepared to comply with other condition(s) of this permit to satisfy this CRP requirement. Upon request, the Permittee shall provide IDEM, OAQ with clear reference and access to other documents used to satisfy this CRP requirement.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
  - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

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- (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
- (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
- (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

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## C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this
  permit, the Permittee shall take appropriate response actions. The Permittee shall
  submit a description of these response actions to IDEM, OAQ, within thirty (30) days of
  receipt of the test results. The Permittee shall take appropriate action to minimize
  excess emissions from the affected facility while the response actions are being
  implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

#### C.17 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

(a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received by April 15 of each year in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

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C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

#### C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years.

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#### **Stratospheric Ozone Protection**

#### Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- Persons opening appliances for maintenance, service, repair or disposal must comply (a) with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- Persons performing maintenance, service, repair or disposal of appliances must be (c) certified by an approved technician certification program pursuant to 40 CFR 82.161.

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**SECTION D.1** 

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) Class C Line, producing a maximum of 2.5 units per hour, installed in January 1992, consisting of the following:
  - (1) Sub-assembly area coating operations, identified as CSA-1, consisting of:
    - (A) hand, roll, bead, aerosol, high volume low pressure (HVLP) spray, and cup gun spray application of miscellaneous coatings and adhesives applied to metal, wood construction materials, prefinished wood cabinets and counter tops, plastic, and fiberglass product parts during motor home assembly, with emissions exhausting fugitively into the building; and

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- (B) hand and aerosol application of miscellaneous solvents and cleaners.
- (2) Final finish area coating operations, identified as CFF, consisting of:
  - (A) hand, aerosol, cup gun spray, and pressure pot spray application of miscellaneous coatings applied to metal, wood construction materials, pre-fabricated cabinets and counter tops, and fiberglass parts during motor home finishing and touch-up, with emissions exhausting fugitively into the building; and
  - (B) hand and aerosol application of miscellaneous solvents and cleaners.
- (3) Metal frame undercoating spray application area, identified as CUA, with emissions exhausting fugitively into the building.
- (b) One (1) Class A Line 1, producing a maximum of 2 units per hour, installed in June 1999, consisting of the following:
  (1) Sub-assembly area coating operations, identified as A1SA, consisting of:
  - (A) hand, roll, bead, aerosol, high volume low pressure (HVLP) spray and airless spray application of miscellaneous coatings and adhesives applied to metal, wood construction materials, pre-finished wood cabinets and counter tops, plastic, and fiberglass product parts during motor home assembly, with emissions exhausting fugitively into the building; and
  - (B) hand and aerosol application of miscellaneous solvents and cleaners.
  - (2) Final finish area coating operations, identified as A1FF, consisting of:
    - (A) hand, aerosol, high volume low pressure (HVLP) spray, and airless spray application of miscellaneous coatings applied to metal, wood construction materials, pre-fabricated cabinets and counter tops, and fiberglass parts during motor home finishing and touch-up, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.
- (c) One (1) Class A Line 2 (Diesel Pusher Production Line), producing a maximum of 0.375 units per hour, installed in 2002, consisting of the following:
  - (1) Sub-assembly area coating operations, identified as A2SA, consisting of:
    - (A) hand, roll, bead and aerosol application of miscellaneous coatings and adhesives applied to metal, wood construction materials, pre-finished wood cabinets and counter tops, plastic, and fiberglass product parts during motor home assembly, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.
  - (2) Final finish area coating operations, identified as A2FF, consisting of:
    - (A) hand and aerosol application of miscellaneous coatings applied to metal, wood construction materials, pre-fabricated cabinets and counter tops, and fiberglass parts during motor home finishing and touch-up, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(I) Application of miscellaneous solvents and cleaners for maintenance at the Class C, Class A - Line 1, and Class A - Line 2 product line buildings, with VOC emissions below the insignificant thresholds of three (3) pounds per hour or 15 pounds per day.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

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#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 2-8-4][326 IAC 2-2][40 CFR 52.21]

The total combined VOC input usage to the Class C, Class A - Line 1, and Class A - Line 2 product lines, including but not limited to the usage of sealants, bonding materials, adhesives, caulks, wood stains, paints and VOC solvents, minus used VOC solvent shipped off site, shall be limited to 99.5 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month. This usage limit is equivalent to 99.5 tons of VOC emitted per 12 consecutive month period.

Compliance with this limitation, including the potential to emit for insignificant activities, shall limit the source-wide potential to emit of VOC to less than 100 tons per year and make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source. Compliance with this condition shall also make the requirements of 326 IAC 2-2 and 40 CFR 52.21 (PSD), not applicable to the source.

#### D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

- (a) The VOC input usage to each of facilities CSA-1, CFF, A1SA and A1FF, including but not limited to sealants, bonding materials, adhesives, caulks, wood stains, paints and VOC solvents, minus used VOC solvent shipped off site, shall be limited to less than 25 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month. This usage limit is equivalent to 25 tons of VOC emitted per 12 consecutive month period, per facility. The VOC usage for wood furniture/cabinet coating is not included in this determination since such usage is regulated at Condition D.1.4.
- (b) Any change or modification which may increase potential VOC usage to twenty-five (25) tons per year at facilities A2SA or A2FF, minus used VOC solvent shipped off site, shall require OAQ's prior approval before such change can take place at either facility. The VOC usage for wood furniture/cabinet coating is not included in this determination since it is regulated at Condition D.1.4.

Compliance with this requirement shall make the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) not applicable to these facilities.

#### D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Any change or modification which may increase actual VOC emissions to greater than fifteen (15) pounds per day, before add-on controls, when coating metal parts at each of facilities CSA-1, CFF, CUA, A1SA, A1FF, A2SA and A2FF shall require OAQ's prior approval before such change can take place at any of these facilities.

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#### D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), surface coatings applied to wood furniture and cabinets at each of facilities CSA-1, CFF, A1SA, A1FF, A2SA or A2FF shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

#### D.1.5 Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4][326 IAC 2-4.1-1]

- (a) The total combined input usage of any single hazardous air pollutant (HAP) to the Class C, Class A Line 1, and Class A Line 2 product lines, minus used HAP solvent shipped off site, shall be limited to less than 10 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month. This usage limit is equivalent to 10 tons of single HAP emitted per 12 consecutive month period. Compliance with this condition shall limit the source-wide potential to emit a single HAP to less than 10 tons per twelve (12) consecutive month period.
- (b) The total combined input usage of all hazardous air pollutants (HAPs) to the Class C, Class A Line 1, and Class A Line 2 product lines, minus used HAP solvent shipped off site, shall be limited to less than 24.8 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month. This usage limit is equivalent to 24.8 tons of total HAPs emitted per 12 consecutive month period. Compliance with this condition, including the potential to emit for insignificant activities, shall limit the source-wide potential to emit total HAPs to less than 25 tons per 12 consecutive month period.

Compliance with these limitations shall make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source. Compliance with this condition shall also make the Maximum Achievable Control Technology (MACT) requirements of 326 IAC 2-4.1-1 not applicable to facilities A1SA, A1FF, A2SA and A2FF.

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#### D.1.6 Particulate Matter (PM) [40 CFR 52 Subpart P]

Pursuant to 40 CFR 52 Subpart P and FESOP 039-5814-00220 issued on December 9, 1996, the particulate matter from the spray coatings applied at the Class C, Class A - Line 1, and Class A - Line 2 sub-assembly and final finish areas CSA-1, CFF, CUA, A1SA, A1FF, A2SA, and A2FF each shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

#### **Compliance Determination Requirements**

#### D.1.7 Volatile Organic Compounds (VOC) [326 IAC 8-1-2][326 IAC 8-1-4]

Compliance with the VOC usage and emission limitations contained in Conditions D.1.1, D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

#### D.1.8 VOC and HAP Emissions

Compliance with Conditions D.1.1 and D.1.2(a) for VOC emissions and D.1.5 for HAP emissions shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound, single HAP and combined HAP usage for the most recent twelve (12) month period.

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### D.1.9 Particulate [326 IAC 6-3-2(d)]

Any change or modification which may increase the coating application rate to greater than five (5) gallons per day from any of surface coating manufacturing processes CSA-1, CFF, CUA, A1SA, A1FF, A2SA, or A2FF shall require a control device, pursuant to 326 IAC 6-3-2(d). Compliance with this limitation shall include only surface coatings that emit or have the potential to emit particulate and does not include surface coatings applied using dip, roll, flow, or brush coatings; applications of aerosol coating products to repair minor surface damage and imperfections; or spray applied glues and adhesives at this source which have been determined by IDEM, OAQ not to have the potential to emit particulate.

#### Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

#### D.1.10 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1 through D.1.4, the Permittee shall maintain records in accordance with (1) through (8) below. Records maintained for (1) through (8) shall be taken monthly, except where noted, and shall be complete and sufficient to establish compliance with the VOC usage limits and emission limits established in Conditions D.1.1 through D.1.4, and the HAP usage limits established in Condition D.1.5. Records taken to demonstrate compliance with Conditions D.1.1, D.1.2(a), and D.1.5 shall be available to IDEM, OAQ, within 30 days of the end of each compliance period.

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- (1) The VOC and HAP content of each coating material and solvent used.
- (2) The amount of coating material and solvent less water used on a monthly basis at each of facilities CSA-1, CFF, CUA, A1SA, A1FF, A2SA or A2FF.
  - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
  - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents. Records of used solvent sent off site as waste shall be maintained when such is included in a demonstration of compliance with D.1.1 through D.1.5.
- (3) Method of application for all wood furniture coatings used;
- (4) Daily VOC emitted at each of facilities CSA-1, CFF, CUA, A1SA, A1FF, A2SA and A2FF, when coating metal parts and a log of the dates of emissions:
- (5) Monthly VOC usage at each of the six (6) facilities CSA-1, CFF, A1SA, A1FF, A2SA and A2FF, and total combined VOC usage to Class C, Class A - Line 1, and Class A - Line 2 production;
- (6) Monthly individual and total HAP usage at Class C, Class A Line 1, and Class A Line 2 production combined;
- (7) The weight of VOCs emitted from each of the six (6) facilities, and the total VOC emitted for the three product lines, for each compliance period. This shall exclude the weight of VOCs emitted due to wood furniture/cabinet coatings regulated at Condition D.1.4; and
- (8) The weight of individual and total HAPs emitted from Class C, Class A Line 1, and Class A Line 2 production combined, for each compliance period.
- (b) To document compliance with Condition D.1.9, the Permittee shall maintain records of daily coating usage at each of facilities CSA-1, CFF, CUA, A1SA, A1FF, A2SA and A2FF.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1, D.1.2(a) and D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### SECTION D.2

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) Class C Line, producing a maximum of 2.5 units per hour, installed in January 1992, consisting of the following:
  - (3) Sub-assembly area woodworking operations, identified as CSA-2, using 1,267 pounds of wood per hour, with particulate matter emissions controlled by one (1) cyclone with bag dust collector exhausting within the building and one (1) cyclone dust collector exhausting to the atmosphere.
- (b) One (1) Class A Line 1, producing a maximum of 2 units per hour, installed in June 1999, consisting of the following:
  - (3) Sub-assembly area production operations, including foam insulation cutting and woodworking operations for both Class A Lines 1 and 2, identified as ASA, using 300 pounds of foam insulation and 1,460 pounds of wood per hour, with particulate matter emissions controlled by two (2) cyclones and bag filter, identified as C3, exhausting within the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emitted from the facilities listed below shall be limited as stated, based on the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

E = 4.10 P 
$$^{0.67}$$
 where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Emission Unit/Activity	Process Weight Rate (lbs/hr)	Allowable Emissions (326 IAC 6-3-2) (lb/hr)
Class C woodworking (CSA-2)	1,267	3.02
Class A - Line 1&2 woodworking & foam cutting (ASA)	1,760	3.76

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#### D.2.2 PM-10 Emission Limitation [326 IAC 2-8-4][326 IAC 2-2][40CFR 52.21]

PM-10 emitted from the process operation control devices shall be limited as follows:

- (a) The PM-10 emissions from Class C Line woodworking operations CSA-2 shall not exceed 4.763 pounds of PM-10 emitted per ton of wood processed. This is equivalent to 3.02 pounds of PM-10 per hour, based on a maximum throughput of 0.634 tons (i.e., 1,267 pounds) of wood per hour.
- (b) The PM-10 emissions from Class A Lines 1 and 2 foam insulation cutting and woodworking operations ASA shall not exceed 4.273 pounds of PM-10 emitted per ton of foam and wood processed. This is equivalent to 3.76 pounds of PM-10 per hour, based on a maximum throughput of 0.880 tons (i.e.,1,760 pounds) of foam and wood per hour.

Based on 8,760 hours of operation per twelve (12) consecutive month period, compliance with this condition limits the potential to emit of PM-10 from the source to less than 100 tons per 12 consecutive month period. Therefore, the requirements of 326 IAC 2-7 (Part 70) are not applicable to this source. Compliance with this condition shall also make the requirements of 326 IAC 2-2 and 40 CFR 52.21, Prevention of Significant Deterioration (PSD), not applicable to this source.

#### D.2.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for facility CSA-2 and its control devices.

#### **Compliance Determination Requirements**

#### D.2.4 Particulate and PM-10 Control

In order to comply with D.2.1 and D.2.2, the two (2) cyclones and bag dust collector for particulate and PM-10 control to facility CSA-2 shall be in operation and control emissions at all times that CSA-2 woodworking equipment is in operation.

#### Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

#### D.2.5 Visible Emissions Notations

- (a) Daily visible emission notations of the CSA-2 woodworking operation stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

#### D.2.6 Cyclone Inspections

An inspection shall be performed each calender quarter of the cyclone controlling woodworking operation CSA-2 when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

#### D.2.7 Cyclone Failure Detection

In the event that a cyclone failure has been observed at CSA-2:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

## Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

#### D.2.8 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the CSA-2 woodworking operation stack exhaust.
- (b) To document compliance with Condition D.2.6, the Permittee shall maintain records of the results of the inspections required under Condition D.2.6.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

There are no specific reporting requirements applicable to these facilities.

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#### **SECTION D.3**

#### **FACILITY OPERATION CONDITIONS**

#### Facility Description [326 IAC 2-8-4(10)]:

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (b) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons:
- (j) Other activities and categories with PM/PM10 emissions below the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day:
  - (1) miscellaneous woodworking at Class A Line 1 subassembly, using 425 pounds of wood per hour, exhausting fugitively within the building;
  - (2) hand routing at Class A Line 1, using up to 500 pounds of prefabricated fiberglass reinforced plastic (FRP) parts per hour, utilizing a cyclone (C4) as particulate matter control and exhausting within the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emitted from the facilities listed below shall be limited as stated, based on the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

E = 
$$4.10 P^{0.67}$$
 where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

Emission Unit/Activity	Process Weight Rate (lbs/hr)	Allowable Emissions (326 IAC 6-3-2) (lb/hr)
Class A - Line 1 miscellaneous woodworking	425	1.45
Class A - Line 1 routing of fiberglass parts	500	1.62

#### D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-4-6, 326 IAC 8-4-9]

Any change or modification which may increase monthly gasoline throughput to ten thousand (10,000) gallons or more from the gasoline fuel transfer and dispensing operation shall require approval from IDEM, OAQ, prior to making the change.

Four Winds International, Inc.

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## **Compliance Determination Requirement**

There are no specific compliance determination requirements applicable to these facilities.

## Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

There are no specific compliance monitoring requirements applicable to these facilities.

## Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

#### D.3.3 Record Keeping Requirement

To document compliance with Condition D.3.2, the Permittee shall maintain records of total monthly gasoline throughput at the transfer and dispensing station. These records shall be maintained in accordance with Section C - General Record Keeping Requirements.

There are no specific reporting requirements applicable to these facilities.

Four Winds International, Inc. Elkhart, Indiana Permit Reviewer: MH / EVP

> INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY**

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FESOP No. F039-14036-00220

## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) **CERTIFICATION**

Source Name: Four Winds International, Inc.

Source Address: 701 County Road 15, Elkhart, Indiana 46515-1486 P.O. Box 1486, Elkhart, Indiana 46515-1486 Mailing Address:

	OP No.:	F039-14036-00220						
	This certification	n shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.						
	Please check wha	at document is being certified:						
9	9 Annual Compliance Certification Letter							
9	9 Test Result (specify)							
9	9 Report (specify)							
9	9 Notification (specify)							
9	Affidavit (specify)							
9	9 Other (specify)							
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.								
Sig	nature:							
Printed Name:								
Title/Position:								
Phone:								
Dat	te:							

Four Winds International, Inc.

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# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH

P.O. Box 6015 100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674

Fax: 317-233-5967

## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) EMERGENCY OCCURRENCE REPORT

Source Name: Four Winds International, Inc.

Source Address: 701 County Road 15, Elkhart, Indiana 46515-1486 Mailing Address: P.O. Box 1486, Elkhart, Indiana 46515-1486

FESOP No.: F039-14036-00220

## This form consists of 2 pages

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 $\boldsymbol{9}$  This is an emergency as defined in 326 IAC 2-7-1(12)

CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and

CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile

Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

#### If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

Phone:

f any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency started:	
Date/Time Emergency was corrected:	
Was the facility being properly operated at the time of the emergency? Y Describe:	N
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>X</sub> , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are not imminent injury to persons, severe damage to equipment, substantial loss of capilloss of product or raw materials of substantial economic value:	
Form Completed by: Title / Position:	

A certification is not required for this report.

Four Winds International, Inc. Elkhart, Indiana Permit Reviewer: MH / EVP Page 43 of 46 FESOP No. F039-14036-00220

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

## **FESOP Quarterly Report**

				1 –	JOF Q	uarterr	y ixepo					
Source Name: Source Address: Four Winds International, Inc. 701 County Road 15, Elkhart, Indiana 46515-1486 P.O. Box 1486, Elkhart, Indiana 46515-1486 FESOP No.: Facilities: Class A - Line 1 subassembly & final finish coating facilities A1SA & A1FF; and Class C Line subassembly & final finish coating facilities CSA & CFF VOC input usage VOC input usage to each facility shall be limited to less than 25 tons per twelve (12) consecutive month period, excluding the VOC usage for wood furniture/cabinet coating since such usage is regulated at Condition D.1.4.  YEAR:												
				YI	EAR:							
	VOC Usage This Month (tons)  VOC Usage Previous 11 Months (tons)  12 Month Total VOC Usage (tons)											
Month Class A - Line 1 Class C Line Class A				Class A - Line 1 Class C Line Class A			A - Line 1 Class C Line					
	A1SA	A1FF	CSA	CFF	A1SA	A1FF	CSA	CFF	A1SA	A1FF	CSA	CFF
Month 1												
Month 2												
Month 3												
9 No deviation occurred in this quarter. 9 Deviation/s occurred in this quarter. Deviation has been reported on:  Submitted by: Title / Position: Signature: Date: Phone:												

Attach a signed certification to complete this report.

Four Winds International, Inc. Elkhart, Indiana FESOP No. F039-14036-00220

Permit Reviewer: MH / EVP

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY **COMPLIANCE DATA SECTION** 

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## **FESOP Quarterly Report**

Source Name:	Four Winds International, Inc.
Source Address:	701 County Road 15, Elkhart, Indiana 46515-1486
Mailing Address:	P.O. Box 1486, Elkhart, Indiana 46515-1486

FESOP No.: F039-14036-00220

Class C, Class A - Line 1, and Class A - Line 2 product lines Facility:

Parameter: VOC, single and combined HAPs input usage

(a) total combined VOC input to the Class C, Class A - Line 1, and Class A - Line 2 Limit: product lines shall be limited to 99.5 tons per twelve (12) consecutive month period

- (b) total combined input usage of any single hazardous air pollutant (HAP) to the Class C, Class A - Line 1, and Class A - Line 2 product lines shall be limited to less than 10 tons per twelve (12) consecutive month period
- (c) total combined input usage of all hazardous air pollutants (HAPs) to the Class C, Class A - Line 1, and Class A - Line 2 product lines shall be limited to less than 24.8 tons per twelve (12) consecutive month period

YEAR:

Marath	Total Class A-1, Class A-2 & Class C Usage This Month (tons)		Total Class A-1, Class A-2 & Class C Usage Previous 11 Months (tons)			Total Class A-1, Class A-2 & Class C 12-Month Usage (tons)			
Month	VOC	Single* HAP	Combined HAPs	VOC	Single* HAP	Combined HAPs	voc	Single* HAP	Combined HAPs
Month 1									
Month 2									
Month 3									

<sup>\*</sup>List the single HAP with the greatest emission rate

9	No c	deviation	occurred	in	this	quarter
---	------	-----------	----------	----	------	---------

9	occurred in this quarte as been reported on:	r.
Title		

Attach a signed certification to complete this report.

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Four Winds International, Inc. Elkhart, Indiana Permit Reviewer: MH / EVP

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY **COMPLIANCE DATA SECTION**

## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Four Winds International, Inc.

701 County Road 15, Elkhart, Indiana 46515-1486 Source Address: Mailing Address: P.O. Box 1486, Elkhart, Indiana 46515-1486

FESOP No.:	F039-14036	5-00220							
	Months:	to	Year:						
				Page 1 of 2					
This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".									
9 NO DEVIATI	9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.								
9 THE FOLLO	WING DEVIATION	ONS OCCURRED T	HIS REPORTING PER	RIOD					
Permit Require	ement (specify p	permit condition #)							
Date of Deviati	ion:		<b>Duration of Deviatio</b>	n:					
Number of Deviations:									
Probable Cause of Deviation:									
Response Steps Taken:									
Permit Require	ement (specify p	permit condition #)							
Date of Deviati	ion:		Duration of Deviation:						
Number of Dev	/iations:								
Probable Caus	Probable Cause of Deviation:								
Response Steps Taken:									

Page 2 of 2

	Page 2 01 2						
Permit Requirement (specify permit condition #)							
Date of Deviation: Duration of Deviation:							
Number of Deviations:							
Probable Cause of Deviation:							
Response Steps Taken:							
Permit Requirement (specify permit condition #)							
Date of Deviation:	Duration of Deviation:						
Number of Deviations:							
Probable Cause of Deviation:							
Response Steps Taken:							
Permit Requirement (specify permit condition #)							
Date of Deviation:	Duration of Deviation:						
Number of Deviations:							
Probable Cause of Deviation:							
Response Steps Taken:							
Form Completed By:							
Title/Position:							
Date:							
Phone:							

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Federally Enforceable State Operating Permit (FESOP) Renewal

#### **Source Background and Description**

Source Name: Four Winds International, Inc.
Source Location: 701 CR 15, Elkhart, IN 46515-1486

County: Elkhart SIC Code: 3716

Operation Permit No.: F039-14036-00220
Permit Reviewer: Michael Hirtler / EVP

On August 25, 2002, the Office of Air Quality (OAQ) had a notice published in The Truth, Elkhart, Indiana, stating that Four Winds International, Inc. had applied for a Federally Enforceable State Operating Permit (FESOP) Renewal to operate a motor home/recreational vehicle manufacturing source. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On September 23, 2002, October 16, 2002, and December 5, 2002, OAQ received comments from Bruce Carter Associates, L.L.C., on behalf of Four Winds International, Inc., in relation to the proposed FESOP Renewal. OAQ also received email comments on November 14, 2002 from Bruce Carter Associates, L.L.C., on behalf of Four Winds International, Inc., in relation to the proposed FESOP Renewal. The summary of the comments and related responses is as follows, with any changes made to the permit shown in bold and deleted permit language shown with a line through it:

#### Comment 1:

Condition B.10(c), page 11 of 46:

Delete the phrase "condition B" located between the phrases "requirements set forth in" and "Emergency Provisions" and replace it with the phrase "condition B.14."

#### **Response to Comment 1:**

Condition B.14 is an accurate cross-reference for Condition B.10(c). However, OAQ has decided to utilize more general language to minimize the potential for referencing inconsistencies should a future revision to the permit be made. The condition is revised as follows:

## B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition Section B, Emergency Provisions.

Four Winds International, Inc.

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#### Comment 2:

Condition B.13(a) (Preventive Maintenance Plan), page 12 of 46:

This condition should recognize that some documents prepared in response to other permit conditions may contain information required for Preventive Maintenance Plans. Therefore, this condition should contain language stating if the information required for a Preventive Maintenance Plan is developed as part of another document required under this permit, a separate Preventive Maintenance Plan is not required.

#### **Response to Comment 2:**

OAQ agrees that it is not necessary to duplicate the entire Preventive Maintenance Plan document, or elements thereof, should such information exist in documents developed to comply with other applicable requirements of the permit. The Permittee can reference in the PMP and/or other relevant document(s) that the information required by the PMP, pursuant to Condition B.13, is contained in such other document(s). Cross-referencing of documents must be clear and all documents used to comply with this condition must be readily accessible such that the PMP can be provided to IDEM, OAQ upon request. Condition B.13(a) is revised as follows.

#### B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee may use documents prepared to comply with other condition(s) of this permit to satisfy this PMP requirement. Upon request, the Permittee shall provide IDEM, OAQ with clear reference and access to other documents used to satisfy this PMP requirement.

#### Comment 3:

Condition B.13(c), page 13 of 46:

The second sentence in this condition should be deleted because it allows IDEM to order the Permittee to revise a Preventive Maintenance Plan in certain circumstances and the circumstances identified in this condition are not specified in the underlying regulations. Therefore, this provision is beyond the requirements of 326 IAC 1-6-3, 326 IAC 2-8-4(9) and 326 IAC 2-8-5(a)(1).

Four Winds International, Inc.

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#### **Response to Comment 3:**

Both 326 IAC 2-8-4(9) and 326 IAC 1-6-3 include a provision requiring a FESOP source to forward their PMP to IDEM upon request. 326 IAC 1-6-3(b) also provides for IDEM's review and approval of such PMPs. Further, 326 IAC 2-8-5(a)(1) requires sufficient information, including records and reports, that assure compliance with the terms and conditions of the FESOP. Should a situation arise where a permit term is violated as a result of improper equipment maintenance, then the PMP is no longer approvable. As such, IDEM has the authority to request the Permittee to submit an approvable PMP per 326 IAC 1-6-3, one that would revise its maintenance practices to again comply with 326 IAC 2-8-5(a)(1) and assure compliance with relevant permit terms and conditions. There is no change to this condition due to this comment.

#### Comment 4:

Condition B.19(a)(2) (Operational Flexibility), page 18 of 46:

This condition should be deleted because it exceeds the requirements of 326 IAC 2-8-15.

#### **Response to Comment 4:**

The purpose of Condition B.19 is to indicate, pursuant to 326 IAC 2-8-15, when a source would be able to make a change without a prior permit revision. Although Condition B.19(a)(2) and its attendant citation (i.e., 326 IAC 2-8-11.1) are not referenced at 326 IAC 2-8-15, it is included in this condition to ensure that a Permittee will not inadvertently make a change which is otherwise subject to the provisions of 326 IAC 2-8-11.1 (Permit Revisions). For those revisions requiring approval pursuant to 326 IAC 2-8-11, once the approval is issued by IDEM, OAQ, Condition B.19(a) provides that the Permittee can make the relevant source revision. To provide greater clarity, the rule citation at the title of the condition is changed as follows:

## B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

#### Comment 5:

Condition B.19(a)(5) (Operational Flexibility), page 18 of 46

The phrase "326 IAC 2-8-15(b)" in the final sentence of B.19(a)(5) should be deleted and replaced with the phrase "326 IAC 2-8-15(b)(2)" to reflect the language in 326 IAC 2-8-15(a)(5).

Four Winds International, Inc.

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#### **Response to Comment 5:**

IDEM, OAQ agrees with the request and Condition B.19(a)(5) is revised as follows:

#### B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
  - (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

#### Comment 6:

Condition B.19(b) (Operational Flexibility), page 18 of 46:

Condition B.19(b) should be deleted and replaced with language that more closely mirrors the provisions of 326 IAC 2-8-15(b).

#### **Response to Comment 6:**

IDEM, OAQ agrees that Condition B.19(b) is not a provision of 326 IAC 2-8-15 and will be removed from this permit. The provision of 326 IAC 2-8-15(b) will not be added to this permit, because it does not contain an emission cap established in accordance with 326 IAC 2-1.1-12. The condition is revised as follows, including the responses to comments 4 and 5:

#### B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

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(4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:
- (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
  - (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

Four Winds International, Inc. Elkhart, Indiana

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(d)(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]

The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

#### Comment 7:

Condition B.21(e), page 19 of 46:

Condition B.21(e) should be deleted because it is not one of the listed authorizations in 326 IAC 2-8-5(a)(2).

#### **Response to Comment 7:**

326 IAC 2-8-5(a)(2) provides IDEM the authority to inspect the Permittee's premises. As part of an inspection, it may be necessary to use equipment to document the conditions in order to assure compliance with the permit or applicable requirements. There are no changes to this condition due to this comment.

#### Comment 8:

Condition B.22(c), page 20 of 46:

The citation at the end of Condition B.22(c) should be revised to reference the correct regulation. The reference to 326 IAC 2-8-11(b)(3) should be replaced with a reference to 326 IAC 2-8-10(b)(3).

### **Response to Comment 8:**

IDEM, OAQ agrees and Condition B.22 is revised to correct the citation as follows:

#### B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-1110(b)(3)]

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#### Comment 9:

Condition C.2, page 21 of 46:

Four Winds' manufacturing operation consists of a number of individual manufacturing processes. As described in 326 IAC 6-3-1.5(2), a manufacturing processes include "actions, operations, or treatments in which a mechanical, physical, or chemical transformation of material occurs...." Four Winds has a variety of individual manufacturing processes that make up the sub-assembly and final finish operations for each of the three lines. Depending on the line, the following examples of sub-assembly activities involve one or more individual manufacturing processes: lamination activities, routing, floor and engine cover assembly and installation, dash installation, valance assembly and installation, electrical, slideout, and appliance setting. Therefore, this condition should be revised to include the following language: "Examples of sub-assembly activities that involve one or more individual manufacturing processes include lamination activities, routing, floor and engine cover assembly and installation, dash installation, valance assembly and installation, electrical, slideout, and appliance setting."

#### **Response to Comment 9:**

A goal of Section C is to set out the compliance requirements that are applicable to the entire source, so that the language does not need to be repeated in each applicable Section D condition. Condition C.2 is included in the permit as a general requirement to address relatively small manufacturing processes with process weight rates less than 100 pounds per hour. Such activities are typically listed as insignificant activities in Section A of the permit. Even if a Permittee does not currently conduct a manufacturing process meeting the process weight rate criteria, the condition also serves to simplify future approvals of such processes affected by 326 IAC 6-3-2. This condition is intended to be general in content and applicability and, therefore, Condition C.2 remains unchanged due to this comment.

#### Comment 10:

Condition C.7, page 22 of 46 (comment received September 23, 2002):

This condition should be revised to clearly state the operation of air pollution control devices are only required if the device is necessary to comply with an applicable limit and the emission unit is vented to the atmosphere. Therefore, the condition should be replaced with the following: "Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit that is necessary to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation and venting to the atmosphere."

Condition C.7, page 22 of 46 (follow-up comment received December 5, 2002):

Four Winds' continues to believe this condition should be revised to clearly state the operation of air pollution control devices are only required if the device is necessary to comply with an applicable limit and the emission unit is vented to the atmosphere. By imposing emission limits on equipment that vent indoors, IDEM is usurping IOSHA's jurisdiction. Therefore, the condition should be replaced with the following: "Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit that is necessary to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation and venting to the atmosphere."

Four Winds International, Inc.

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#### **Response to Comment 10:**

Language to qualify that control device operation is required only when it is venting to the atmosphere is inconsistent with the intent of the condition. It is possible for an emissions unit to emit inside of a building, and then have such emissions escape the building through doors, windows and general building ventilation. A control device that is needed to comply with an applicable requirement must be operated at all times, without exception. IDEM believes the existing language to be clear in this regard. There is no change to this condition due to this comment.

#### Comment 11:

Condition C.9(a), page 22 of 46:

This condition should be revised to insert the phrase "in a facility being renovated" between the phrases "removed or disturbed" and "is at least 260 linear feet." This revision is necessary to more accurately reflect the scope of the permit condition.

#### **Response to Comment 11:**

Pursuant to 326 IAC 14-10-1, *Applicability*, the notification requirements of 326 IAC 14-10-3 always apply to the two demolition scenarios identified in the rule. Further, the same notification requirements apply to each renovation scenario identified in the rule when the disturbed amount of regulated asbestos containing material (RACM) equals or exceeds one of the amounts stated in Condition C.9(a). As such, the values cited in Condition C.9(a) reflect the minimum thresholds that apply which require notification under 326 IAC 14-10-3 for all possible actions, and not just renovation actions. There is no change to this condition due to this comment.

#### Comment 12:

Condition C.15, pages 25 and 26 of 46:

This condition is not authorized by either 326 IAC 2-8-4 or 326 IAC 2-8-5. In addition, this condition fails to recognize that a compliance monitoring plan does not have to be an entirely new document. To the extent a compliance monitoring plan is necessary, the plan should be able to reference information contained in other documents. Therefore, this condition should be deleted.

#### **Response to Comment 12:**

Since this condition refers to a Compliance Response Plan (CRP), it is presumed that the comment addresses such and not a compliance monitoring plan which is not referenced in the condition. There is sufficient authority for IDEM to require the CRP as part of requisite compliance monitoring. 326 IAC 2-8-4(1) requires that all FESOPs contain operational requirements and limitations that assure compliance with all applicable requirements. 326 IAC 2-8-4(3) requires that all FESOPs contain monitoring and related record keeping requirements which assure that all reasonable information is provided to evaluate continuous compliance with applicable requirements. 326 IAC 2-8-5(3)(A)(ii) requires that, at a minimum, the periodic monitoring requirements must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance, even where the applicable requirement does not require periodic testing or instrumental monitoring. Also, 326 IAC 2-8-5(a)(1) requires that each FESOP contain compliance certification, testing, monitoring, reporting and record keeping requirements sufficient to assure compliance with the terms and conditions of the FESOP, and, pursuant to 326 IAC 2-8-5(a)(4), any other provisions that IDEM may require.

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In addition to the above, the requirement for compliance monitoring, or the elements thereof (i.e., CRP), are consistent with respect to the court decision in Appalachian Power Company, et. al. v. Environmental Protection Agency, (D.C. Circ. 2000) 208 F.3d 1015. Although many Permittees have recently claimed that the requirement for compliance monitoring, or the elements thereof, are inconsistent with the court's ruling in this case, it is noted that Indiana's Title V (and FESOP) rules concerning compliance monitoring are somewhat different than the corresponding federal counterpart. The provisions of 326 IAC 2-8-4(3) state that each FESOP must include: "Monitoring and related record keeping and reporting requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements." Additionally, the language of 326 IAC 2-8-4(3) clearly suggests that existing federal monitoring requirements are considered only as "minimum" permit requirements. Further, the Petitioners in Appalachian Power did not guestion a state permitting authority to adopt more stringent permit requirements than federal law requires. Rather, the Petitioners questioned the EPA's authority to require state permitting authorities, in issuing Title V permits, to make revisions to monitoring requirements in existing federal standards, Id. at p. 1019, n.6, p. 1024. The difference in the Indiana Title V (and FESOP) rules results in Indiana's ability to institute more stringent compliance monitoring requirements than the "gap-filling" constraints that were set forth by the court in Appalachian Power. Therefore, for the reasons cited in this and the preceding paragraphs, Condition C.15 shall remain in the permit without change, except for that described in the following paragraph.

With respect to the comment on the content of the CRP, OAQ agrees that it is not necessary to duplicate the entire CRP document, or elements thereof, should such information exist in documents developed to comply with other applicable requirements of the permit. The Permittee can reference in the CRP and/or other relevant document(s) that the information required by the CRP, pursuant to Condition C.15, is contained in such other document(s). Cross-referencing of documents must be clear and all documents used to comply with this condition must be readily accessible such that the CRP can be provided to IDEM, OAQ upon request. Condition C.15(a) is revised as follows.

- C.15 Compliance Response Plan Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]
  - (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ, upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
    - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
    - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

The Permittee may use documents prepared to comply with other condition(s) of this permit to satisfy this CRP requirement. Upon request, the Permittee shall provide IDEM, OAQ with clear reference and access to other documents used to satisfy this CRP requirement.

#### Comment 13:

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Conditions C.19(a) and (d), page 28 of 46:

These conditions reference quarterly reports. 326 IAC 2-8-4(3)(C) requires the submission of monitoring reports at least every six (6) months. IDEM has not identified any rational for requiring Four Winds to submit monitoring records more frequently than required by the underlying regulation. Therefore, both conditions should be revised to require the submission of reports semi-annually.

Condition C.7, page 22 of 46 (follow-up comment received December 5, 2002):

The last sentence in C.19(d) should be revised by deleting the phrase "All reports do" and replacing it with the phrase "Section D identifies which reports". This revision is necessary in the event Section D requires the submission of certain reports that do not require the signature of the "authorized representative". Currently, Section D specifies which reports require the authorized representative's signature. Therefore, the suggested revision will avoid potentially conflicting conditions.

#### **Response to Comment 13:**

IDEM has the authority to require quarterly reports. Reports must be submitted at least every six (6) months under 326 IAC 2-8-4(3)(C). OAQ believes that a period of time longer than every calendar quarter will not provide sufficient reporting of continuous compliance. There is no change to this condition due to these comments.

Relating to the comment on report certification, 326 IAC 2-8-4(3)(C)(i) indicates that "all required reports must be certified by an authorized individual consistent with section 3(d) of this rule." There is again no change to this condition due to this comment.

Notwithstanding these comments, however, IDEM, OAQ is revising C.19(d) to indicate that the stated requirement applies to all reports:

#### C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(d) Unless otherwise specified in this permit, any quarterly all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### Comment 14:

Condition D.1.2, page 31 of 46 (comment received September 23, 2002):

This condition should be deleted because it is subsumed by Condition D.1.1. Because the source is subject to a 99.5 ton source-wide limit, it is unnecessary to include additional emission limits on individual portions of the source. In addition, Condition D.1.2 refers to VOC usage, not VOC emissions. The air pollution control regulations apply to emissions. Therefore, to the extent Condition D.1.2 is necessary, it should refer to VOC emissions - not VOC usage.

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Condition D.1.3, page 31 of 46 (comment received September 23, 2002):

The reference to VOC usage in this condition should be replaced with a reference to VOC emissions. The air pollution control regulations apply to emissions. Therefore, the reference to VOC usage should be replaced with a reference to VOC emissions.

Conditions D.1.2 and D.1.3, page 31 of 46 (follow-up comment received October 16, 2002)

Although Four Winds understands the rational behind the 100% emission factor for VOCs and HAPs used in surface coating, the current wording of Conditions D.1.2 and D.1.3 does not allow for adjustments to the emissions based on waste shipped off site. Four Winds requests that language be added that would allow for the option of deducting the VOCs and HAPs contained in any waste shipped off site.

## **Response to Comment 14:**

Condition D.1.2(a) is required to limit the potential to emit VOC from each of the four (4) listed facilities such that the requirements of 326 IAC 8-1-6 do not apply. Compliance with Condition D.1.2(a) does not, by default, satisfy the requirements of D.1.1, since the total potential to emit for the source is still greater than 100 tons per year. Condition D.1.1 includes coating facilities other than those listed at D.1.2(a), including VOC usage addressed at D.1.2(b), D.1.3, and D.1.4. Therefore, Conditions D.1.1 and D.1.2 shall remain in this permit as independent limitations.

Regarding the emission rate limits, such can be expressed in the form of an equivalent production or utilization parameter limit when a relationship exists between the parameter and the emission rate. In the case of coating processes, 100 percent (%) of the coating solvents used, including hazardous organic compounds, volatilize and are emitted. Conditions D.1.1, D.1.2 and D.1.5 are revised to clarify this equivalency. Since the requirements for Condition D.1.3 are based on the applicability criteria of 326 IAC 8-2-1, which applies directly to facility VOC emissions, D.1.3 is revised to reflect VOC emissions rather than VOC usage.

OAQ agrees that VOC and hazardous organic solvents that are used by the Permittee, but that are contained after use and shipped off site as a waste product, are not considered as contributing to facility or source emissions. Language is added to D.1.1, D.1.2 and D.1.5 to exclude any VOC and HAP solvent(s) shipped off site, along with corresponding record keeping language added to Condition D.1.10.

Conditions D.1.1, D.1.2, D.1.3, D.1.5, and D.1.10 are revised as follows, including language indicating that compliance is required at the end of each month (i.e., compliance is on a calendar month basis):

## D.1.1 Volatile Organic Compounds (VOC) [326 IAC 2-8-4][326 IAC 2-2][40 CFR 52.21]

The total combined VOC input **usage** to the Class C, Class A - Line 1, and Class A - Line 2 product<del>ion</del> lines, including but not limited to the usage of sealants, bonding materials, adhesives, caulks, wood stains, paints and VOC solvents, **minus used VOC solvent shipped off site**, shall be limited to 99.5 tons per twelve (12) consecutive month period **with compliance demonstrated at the end of each month**. This usage limit, **is equivalent to 99.5 tons of VOC emitted per 12 consecutive month period** including the potential to emit for insignificant activities, is required to limit the source-wide potential to emit of VOC to less than 100 tons per year.

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Compliance with this limitation, **including the potential to emit for insignificant activities**, shall **limit the source-wide potential to emit of VOC to less than 100 tons per year and** make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source. Compliance with this condition shall also make the requirements of 326 IAC 2-2 and 40 CFR 52.21 (PSD), not applicable to the source.

## D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

- (a) The VOC input usage to each of facilities CSA-1, CFF, A1SA and A1FF, including but not limited to sealants, bonding materials, adhesives, caulks, wood stains, paints and VOC solvents, minus used VOC solvent shipped off site, shall be limited to less than 25 tons per twelve (12) consecutive month period with compliance demonstrated at the end of each month. This usage limit is equivalent to 25 tons of VOC emitted per 12 consecutive month period, per facility. The VOC usage for wood furniture/cabinet coating is not included in this determination since such usage is regulated at Condition D.1.4.
- (b) Any change or modification which may increase potential VOC usage to twenty-five (25) tons per year at facilities A2SA or A2FF, minus used VOC solvent shipped off site, shall require OAQ's prior approval before such change can take place at either facility. The VOC usage for wood furniture/cabinet coating is not included in this determination since it is regulated at Condition D.1.4.

Compliance with this requirement shall make the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) not applicable to these facilities.

## D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Any change or modification which may increase actual VOC usage emissions to greater than fifteen (15) pounds per day, before add-on controls, when coating metal parts at each of facilities CSA-1, CFF, A1SA, A1FF, A2SA or A2FF shall require OAQ's prior approval before such change can take place at any of these facilities.

#### D.1.5 Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4][326 IAC 2-4.1-1]

- (a) The total combined input usage of any single hazardous air pollutant (HAP) to the Class C, Class A Line 1, and Class A Line 2 product<del>ion</del> lines, **minus used HAP solvent shipped off site**, shall be limited to less than 10 tons per twelve (12) consecutive month period **with compliance demonstrated at the end of each month**. **This usage limit is equivalent to 10 tons of single HAP emitted per 12 consecutive month period**. Compliance with this condition shall limit the source-wide potential to emit a single HAP to less than 10 tons per twelve (12) consecutive month period.
- (b) The total combined input usage of all hazardous air pollutants (HAPs) to the Class C, Class A Line 1, and Class A Line 2 product<del>ion</del> lines, **minus used HAP solvent shipped off site**, shall be limited to less than 24.8 tons per twelve (12) consecutive month period **with compliance demonstrated at the end of each month**. **This usage limit is equivalent to 24.8 tons of total HAPs emitted per 12 consecutive month period**. Compliance with this condition, including the potential to emit for insignificant activities, shall limit the source-wide potential to emit total HAPs to less than 25 tons per 12 consecutive month period.

Compliance with these limitations shall make the requirements of 326 IAC 2-7 (Part 70) not

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applicable to the source. Compliance with this condition shall also make the Maximum Achievable Control Technology (MACT) requirements of 326 IAC 2-4.1-1 not applicable to facilities A1SA, A1FF, A2SA and A2FF.

## D.1.10 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 through D.1.4, the Permittee shall maintain records in accordance with (1) through (7)(8) below. Records maintained for (1) through (7)(8) shall be taken monthly, except where noted, and shall be complete and sufficient to establish compliance with the VOC usage limits and emission limits established in Conditions D.1.1 through D.1.4, and the HAP usage limits established in Condition D.1.5.
  - (1) The amount and VOC and HAP content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - The amount of coating material and solvent less water used on a monthly basis at each of facilities CSA-1, CFF, A1SA, A1FF, A2SA or A2FF.
    - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
    - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents. Records of used solvent sent off site as waste shall be maintained when such is included in a demonstration of compliance with D.1.1 through D.1.5.
  - (2)(3) Method of application for all wood furniture coatings used;
  - (3)(4) Daily VOC usage emitted at each of facilities CSA-1, CFF, A1SA, A1FF, A2SA or and A2FF, when coating metal parts and a log of the dates of emissions;
  - (4)(5) Monthly VOC usage at each of the six (6) facilities;
  - (5)(6) Monthly individual and total HAP usage at the six (6) facilities combined;
  - (6)(7) The weight of VOCs emitted from each of the six (6) facilities, for each compliance period. This shall exclude the weight of VOCs emitted due to wood furniture/cabinet coatings regulated at Condition D.1.4; and
  - (7)(8) The weight of individual and total HAPs emitted from the six (6) facilities combined, for each compliance period.

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(b) To document compliance with Condition D.1.9, the Permittee shall maintain records of daily coating usage at each of facilities CSA-1, CFF, A1SA, A1FF, A2SA or and A2FF.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### Comment 15:

Condition D.1.5(a), page 32 of46:

The final sentence in this condition is unnecessary because it duplicates the requirements of paragraph C.1. Therefore, this sentence should be deleted and replaced with the following: "Compliance with this condition shall constitute compliance with permit condition C.1(a)(2)."

#### **Response to Comment 15:**

Condition C.1(d) refers to Section D as containing "independently" enforceable conditions used to satisfy C.1. As such, it is unnecessary to refer to Condition C.1 in Condition D.1.5(a), and the final sentence of D.1.5(a) provides an independent statement of fact that relates to the underlying rule associated with the limit. There is no change to this condition due to this comment.

#### Comment 16:

Condition D.1.5(b), page 32 of 46.

The first sentence in this condition should be revised to delete the phrase "less than 24.8 tons" and replace it with the phrase "less than 25 tons." To avoid major source status based on total HAP emissions, the Permittee only need limit total HAP emissions to less than 25 tons, not to less than 24.8 tons. Therefore, there is no need to include as part of this permit a limit for total HAP emissions that is more stringent than the regulatory requirement.

#### **Response to Comment 16:**

A facility-specific limit of 25 tons is not used in this condition due to the need to account for the contribution of hazardous air pollutants (HAP) emitted from other emission units at this source. Deducting such from the source-wide limit of 25 tons (i.e., approximately 0.2 tons from natural gas combustion, see page 1 of 20, TSD Appendix A), results in the facility specific limit of 24.8 tons stated in Condition D.1.5(b). Exclusive of the changes indicated at Response to Comment 14, the following change is made to D.1.5(b), and to Condition D.1.1 since it is affected in a similar manner, in order to clarify the respective limits:

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 2-8-4][326 IAC 2-2][40 CFR 52.21]

The total combined VOC input to the Class C, Class A - Line 1, and Class A - Line 2 product lines, including but not limited to the usage of sealants, bonding materials, adhesives, caulks, wood stains, paints and VOC solvents, shall be limited to 99.5 tons per twelve (12) consecutive month period. This usage limit is required to limit the source-wide potential to emit of VOC to less than 100 tons per year.

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Compliance with this limitation, **including the potential to emit for insignificant activities**, shall make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source. Compliance with this condition shall also make the requirements of 326 IAC 2-2 and 40 CFR 52.21 (PSD), not applicable to the source.

#### D.1.5 Hazardous Air Pollutants (HAPs) [326 IAC 2-8-4][326 IAC 2-4.1-1]

(b) The total combined input usage of all hazardous air pollutants (HAPs) to the Class C, Class A - Line 1, and Class A - Line 2 product lines shall be limited to less than 24.8 tons per twelve (12) consecutive month period. Compliance with this condition, including the potential to emit for insignificant activities, shall limit the source-wide potential to emit total HAPs to less than 25 tons per 12 consecutive month period.

#### Comment 17:

Condition D.1.7, page 33 of 46:

The phrase "content and" located between the phrases "Compliance with the VOC" and "usage limitations" should be deleted because the cited permit conditions do not contain limitations on VOC content. In addition, the word "usage" should be deleted and replaced with the word "emissions" to be consistent with prior comments.

#### **Response to Comment 17:**

Based on the change to Condition D.1.3 as indicated at Response to Comment 14, Condition D.1.7 is changed as follows:

## D.1.7 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage **and emission** limitations contained in Conditions D.1.1, D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

#### Comment 18:

Condition D.1.9, page 33 of 46 (comment received on September 23, 2002):

This condition incorrectly implies that CSA-1, CFF, A1SA, A1FF, A2SA, and A2FF (hereinafter referred to as "Areas") are individual surface coating manufacturing processes. Each of these Areas include a number of individual surface coating manufacturing processes. As described in 326 IAC 6-3-1.5(2), manufacturing processes include an action, operation, or treatment in which a mechanical, physical, or chemical transformation of material occurs...." Depending on the line, the following examples of sub-assembly activities involve one or more individual manufacturing processes: lamination activities, routing, floor and engine cover assembly and installation, dash installation, valance assembly and installation, electrical, slideout, and appliance setting. Therefore, the first sentence in this condition should be deleted and replaced with the following: "Any change or modification which may increase the coating application rate to greater than five (5) gallons per day from any of the individual surface coating manufacturing processes that are part of the operations included in CSA-1, CFF, A1SA, A1FF, A2SA, or A2FF shall require a control device, pursuant to 326 IAC 6-3-2(d)."

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Condition D.1.9, page 33 of 46 (follow-up comment received on October 16, 2002):

Four Winds requests that the various discrete remote activities, referred to in the Response to Comment 18 as "manufacturing processes," be removed from the production line for purposes of determining Rule 6 applicability. We do not believe it is appropriate to group these activities together as a "series of surface coating actions" as has been done by OAQ. Furthermore, this issue should be resolved prior to issuance of the FESOP renewal permit.

By definition, droplets over 100 microns are not considered particulate matter. Given the fact that the surface coatings in question are of a droplet size of approximately 380 microns, perhaps this rule does not even apply.

Condition D.1.9, page 33 of 46 (email follow-up comment received on November 14, 2002):

Two (2) of the materials on pages 4 through 15 of TSD, Appendix A (i.e., emission calculations) pertain to building maintenance activities and are not used as coatings on any of the three motor home product lines. Further, the undercoating material C-35 Cyclo Rubberized Undercoating is applied only on the Class C units in a separate room and is not included in either facility identified as CSA or CFF. Please note the corrected usage rate for this material, changed from 0.011 gallons per unit to 0.017 gallons per unit.

Also, all glues listed on pages 4 through 15 of TSD, Appendix A are non-atomized spray applied. This process does not generate particulate emissions.

Finally, all coating application areas will use less than five (5) gallons of coatings per day. Therefore, pursuant to 326 IAC 6-3-1(15), the surface coating manufacturing processes will comply with Condition D.1.9 and are exempt from the requirements of 326 IAC 6-3-2(d).

Condition D.1.9, page 33 of 46 (follow-up comment received on December 5, 2002):

In addition to reiterating the comment received on September 23, 2002, the commentor adds that, even assuming that each of the Areas are individual surface coating manufacturing processes, none of them have the potential to use 5 gallons of coating per day assuming Four Winds operated 24 hours a day, which it does not. Therefore, these areas are exempt from 326 IAC 6-3-2(d) pursuant to 326 IAC 6-3-1(15). Because none of these Areas could possibly exceed the 5 gallon per day limit based on potential usage, it is impossible for it to exceed the limit based on actual usage. Therefore, the first sentence in this condition should be deleted and replaced with the following: "Any change or modification which may increase the coating application rate to greater than five (5) gallons per day from any of the individual surface coating manufacturing processes that are part of the operations included in CSA-1, CFF, A1SA, A1FF, A2SA, or A2FF shall require a control device, pursuant to 326 IAC 6-3-2(d)."

## **Response to Comment 18:**

Section A.2 of the permit lists the three (3) motor home product lines at this source. These product lines are divided into individual facilities reflective of product assembly and the final finish process. Product assembly is further separated into coating and non-coating operations. Facility identifications of CSA-1, CFF, A1SA, A1FF, A2SA, and A2FF respectively reflect assembly and final finish coating operations for the Class A, Class -1 and Class -2 product lines.

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Particulate emission limitations for surface coating manufacturing processes are provided at 326 IAC 6-3-2(d). In determining the applicability of 326 IAC 6-3-2(d) to the different assembly and coating steps on each product line, the definition of "manufacturing process" has been evaluated. The beginning of this definition states "any single or series of actions, operations or treatments...." Based on this, OAQ has decided that the "series" of surface coating actions on each product line makes each line a "manufacturing process". Segregation of each line into various component coating and assembly activities is inconsistent with the intent of 326 IAC 6-3-2(d), as each step or task contributes to the creation of the final product and not separate intermediate products. Since the product lines are set-up in relatively large open buildings, as indicated by the Permittee, the facilities identified in D.1.9 include those assembly steps occurring in areas at and adjacent to each product line.

Notwithstanding this determination, IDEM, OAQ, Compliance Branch, has evaluated the source operations and agrees with the Permittee that the non-atomized spray application of glues and adhesives at each of the three (3) product lines is not considered as *surface coating*, pursuant to 326 IAC 6-3-1.5(5). There is no potential to emit particulate from this process due to deposition of material at the work area, and Condition D.1.9 is revised to reflect the application of glue and adhesives as an exempt process.

In addition to the above change, Section A.2(a), the Section D.1 facility description box, and Conditions D.1.3, D.1.6, D.1.9, and D.1.10 (with changes from Response to Comment 14 included) are revised to include the undercoating area at the Class C Line as a separate facility. Further, pages 4 through 15 of TSD Appendix A (i.e., emission calculations) are revised to separately list material utilization for the undercoating process, and the materials separately used for building maintenance. Related page 1 of TSD, Appendix A (i.e., source-wide emissions summary) is also revised. Building maintenance has been added to Section A.3 of the permit, as an insignificant activity. These changes follow:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

Three (3) motor home production lines as follows:

- (a) One (1) Class C Line, producing a maximum of 2.5 units per hour, installed in January 1992, consisting of the following:
  - (1) Sub-assembly area coating operations, identified as CSA-1, consisting of:
    - (A) hand, roll, bead, aerosol, high volume low pressure (HVLP) spray, and cup gun spray application of miscellaneous coatings and adhesives applied to metal, wood construction materials, pre-finished wood cabinets and counter tops, plastic, and fiberglass product parts during motor home assembly, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.

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(2) Final finish area coating operations, identified as CFF, consisting of:

- (A) hand, aerosol, cup gun spray, and pressure pot spray application of miscellaneous coatings applied to metal, wood construction materials, pre-fabricated cabinets and counter tops, and fiberglass parts during motor home finishing and touch-up, with emissions exhausting fugitively into the building; and
- (B) hand and aerosol application of miscellaneous solvents and cleaners.
- (3) Metal frame undercoating spray application area, identified as CUA, with emissions exhausting fugitively into the building.
- (3)(4) Sub-assembly area woodworking operations, identified as CSA-2, using 1,267 pounds of wood per hour, with particulate matter emissions controlled by one (1) cyclone with bag dust collector exhausting within the building and one (1) cyclone dust collector exhausting to the atmosphere.
- A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(l)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(I) Application of miscellaneous solvents and cleaners for maintenance at the Class C, Class A - Line 1, and Class A - Line 2 product line buildings, with VOC emissions below the insignificant thresholds of three (3) pounds per hour or 15 pounds per day.

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**SECTION D.1** 

#### FACILITY OPERATION CONDITIONS

## Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) Class C Line, producing a maximum of 2.5 units per hour, installed in January 1992, consisting of the following:
  - (1) Sub-assembly area coating operations, identified as CSA-1, consisting of:
    - (A) hand, roll, bead, aerosol, high volume low pressure (HVLP) spray, and cup gun spray application of miscellaneous coatings and adhesives applied to metal, wood construction materials, prefinished wood cabinets and counter tops, plastic, and fiberglass product parts during motor home assembly, with emissions exhausting fugitively into the building; and

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- (B) hand and aerosol application of miscellaneous solvents and cleaners.
- (2) Final finish area coating operations, identified as CFF, consisting of:
  - (A) hand, aerosol, cup gun spray, and pressure pot spray application of miscellaneous coatings applied to metal, wood construction materials, pre-fabricated cabinets and counter tops, and fiberglass parts during motor home finishing and touch-up, with emissions exhausting fugitively into the building; and
  - B) hand and aerosol application of miscellaneous solvents and cleaners.
- (3) Metal frame undercoating spray application area, identified as CUA, with emissions exhausting fugitively into the building.
- (b) One (1) Class A Line 1, producing a maximum of 2 units per hour, installed in June 1999, consisting of the following:
  (1) Sub-assembly area coating operations, identified as A1SA, consisting of:
  - (A) hand, roll, bead, aerosol, high volume low pressure (HVLP) spray and airless spray application of miscellaneous coatings and adhesives applied to metal, wood construction materials, pre-finished wood cabinets and counter tops, plastic, and fiberglass product parts during motor home assembly, with emissions exhausting fugitively into the building; and
  - (B) hand and aerosol application of miscellaneous solvents and cleaners.
  - (2) Final finish area coating operations, identified as A1FF, consisting of:
    - (A) hand, aerosol, high volume low pressure (HVLP) spray, and airless spray application of miscellaneous coatings applied to metal, wood construction materials, pre-fabricated cabinets and counter tops, and fiberglass parts during motor home finishing and touch-up, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.
- (c) One (1) Class A Line 2 (Diesel Pusher Production Line), producing a maximum of 0.375 units per hour, installed in 2002, consisting of the following:
  - (1) Sub-assembly area coating operations, identified as A2SA, consisting of:
    - (A) hand, roll, bead and aerosol application of miscellaneous coatings and adhesives applied to metal, wood construction materials, pre-finished wood cabinets and counter tops, plastic, and fiberglass product parts during motor home assembly, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.
  - (2) Final finish area coating operations, identified as A2FF, consisting of:
    - (A) hand and aerosol application of miscellaneous coatings applied to metal, wood construction materials, pre-fabricated cabinets and counter tops, and fiberglass parts during motor home finishing and touch-up, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(I) Application of miscellaneous solvents and cleaners for maintenance at the Class C, Class A - Line 1, and Class A - Line 2 product line buildings, with VOC emissions below the insignificant thresholds of three (3) pounds per hour or 15 pounds per day.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

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## D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-2-9]

Any change or modification which may increase actual VOC emissions to greater than fifteen (15) pounds per day, before add-on controls, when coating metal parts at each of facilities CSA-1, CFF, **CUA**, A1SA, A1FF, A2SA or A2FF shall require OAQ's prior approval before such change can take place at any of these facilities.

## D.1.6 Particulate Matter (PM) [40 CFR 52 Subpart P]

Pursuant to 40 CFR 52 Subpart P and FESOP 039-5814-00220 issued on December 9, 1996, the particulate matter from the spray coatings applied at the Class C, Class A - Line 1, and Class A - Line 2 sub-assembly and final finish areas CSA-1, CFF, **CUA**, A1SA, A1FF, A2SA, and A2FF each shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E =rate of emission in pounds per hour; and P =process weight rate in tons per hour

#### D.1.9 Particulate [326 IAC 6-3-2(d)]

Any change or modification which may increase the coating application rate to greater than five (5) gallons per day from any of surface coating manufacturing processes CSA-1, CFF, CUA, A1SA, A1FF, A2SA, or A2FF shall require a control device, pursuant to 326 IAC 6-3-2(d). Compliance with this limitation shall include only surface coatings that emit or have the potential to emit particulate and does not include surface coatings applied using dip, roll, flow, or brush coatings, or; applications of aerosol coating products to repair minor surface damage and imperfections; or spray applied glues and adhesives at this source which have been determined by IDEM, OAQ not to have the potential to emit particulate.

#### D.1.10 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 through D.1.4, the Permittee shall maintain records in accordance with (1) through (8) below. Records maintained for (1) through (8) shall be taken monthly, except where noted, and shall be complete and sufficient to establish compliance with the VOC usage limits and emission limits established in Conditions D.1.1 through D.1.4, and the HAP usage limits established in Condition D.1.5.
  - (1) The VOC and HAP content of each coating material and solvent used.
  - The amount of coating material and solvent less water used on a monthly basis at each of facilities CSA-1, CFF, **CUA**, A1SA, A1FF, A2SA or A2FF.
    - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
    - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents. Records of used solvent sent off site as waste shall be maintained when such is included in a demonstration of compliance with D.1.1 through D.1.5.

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- (3) Method of application for all wood furniture coatings used;
- (4) Daily VOC emitted at each of facilities CSA-1, CFF, **CUA**, A1SA, A1FF, A2SA and A2FF, when coating metal parts and a log of the dates of emissions;
- (5) Monthly VOC usage at each of the six (6) facilities CSA-1, CFF, A1SA, A1FF, A2SA and A2FF, and total combined VOC usage to Class C, Class A Line 1, and Class A Line 2 production;
- Monthly individual and total HAP usage at the six (6) facilities Class C, Class A
   Line 1, and Class A Line 2 production combined;
- (7) The weight of VOCs emitted from each of the six (6) facilities, and the total VOC emitted for the three product lines, for each compliance period. This shall exclude the weight of VOCs emitted due to wood furniture/cabinet coatings regulated at Condition D.1.4; and
- (8) The weight of individual and total HAPs emitted from the six (6) facilities Class C, Class A Line 1, and Class A Line 2 production combined, for each compliance period.
- (b) To document compliance with Condition D.1.9, the Permittee shall maintain records of daily coating usage at each of facilities CSA-1, CFF, **CUA**, A1SA, A1FF, A2SA and A2FF.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### Comment 19:

Condition D 1.10(a), page 33 of 46:

The first sentence in this condition should be revised to be consistent with other revisions previously discussed in these comments. Therefore, the first sentence should be deleted and replaced with the following: "To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (7) below."

#### **Response to Comment 19:**

See Response to Comments 14 and 18.

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#### Comment 20:

Condition D.1.10(a)(3), page 33 of 46 (comment received September 23,2002):

The requirement for daily VOC usage recordkeeping is unnecessary and unduly burdensome, particularly because the substantive requirement this record keeping is intended to document is an annual requirement based on a rolling 12 month period. Therefore, recordkeeping on a monthly basis is adequate. To the extent Condition D.1.10(a)(3) is intended to apply to Condition D.1.3, the requirement for daily recordkeeping is unnecessary because Condition D.1.3 only imposes an affirmative obligation on Permittee to request approval from IDEM should a change or modification increase VOC emissions to greater than fifteen (15) pounds per day. Condition D.1.3 does not impose any requirement that the Permittee monitor daily VOC emissions from the activities subject to this FESOP.

Condition D.1.10(a)(3), page 33 of 46 (follow-up comment received October 16, 2002):

After further review of the potential VOC pounds per day emissions for the six (6) areas of concern, it was noted that only two (2) of these six (6) areas have a PTE of greater than 15 pounds VOC per day. These two (2) areas are Class A, Line 1, Final Finish and Class C Final Finish with daily VOC PTEs of 16.34 and 20.42 pounds respectively. The daily PTEs for the other four (4) areas range from 0.89 pounds to 5.12 pounds. In other words, only about 6% to 34% of the 15 pounds per day applicability threshold. In addition, Four Winds runs a one (1) shift operation, so at the maximum production rates, we would expect actual emissions to be two-thirds less. With a (1) shift operation, actual emissions for the six (6) areas would range from a low of 2% to a high of 45.4% of the applicability threshold. Based on this information, there would appear to be ample room between the expected actual VOC emissions and the applicability threshold. For OAQ to require daily VOC usage record keeping for areas where the PTE is so low relative to the threshold limit is truly unnecessary and places an undue burden on the resources of this source.

Condition D.1.10(a)(3), page 33 of 46 (follow-up comment received December 5, 2002):

The requirement for daily VOC emission record keeping in Section D.1.10(a)(3) (now renumbered as D.1.10(a)(4)) is unnecessary and unduly burdensome. As noted by IDEM, Four Winds currently is not subject to 326 IAC 8-2-9. If Four Winds should propose a modification at the facility that would subject it to that requirement, Section D.1.3 requires it to obtain IDEM's approval before making the modification or change. Because 326 IAC 8-2-9 does not apply to the facility, imposing requirements, such as record keeping, from 326 IAC 8-2-9 is inappropriate. IDEM has determined based on Four Winds' application that 326 IAC 8-2-9 does not apply to its operations. Therefore, requiring daily record keeping to continually demonstrate what has already been determined as part of the permit approval process is unnecessary, excessive, imposes unreasonable burdens on the facility, and provides no environmental benefit.

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#### Response to Comment 20:

The record keeping requirement of Condition D.1.10(a)(3) (now renumbered as D.1.10(a)(4)) is needed to demonstrate compliance with Condition D.1.3. Presently, the Permittee does not utilize coatings in actual amounts that exceed the applicability threshold cited in D.1.3 such that the requirements of 326 IAC 8-2-9 apply. However, for surface coating operations, the coatings used at a source can change at any time, along with the respective VOC contents. Since IDEM does not regulate each and every coating used at a source, the Permittee must demonstrate continued compliance with the non-applicability determination through record keeping of coating material usage. 326 IAC 8-2-9 requires daily compliance, and associated records must be presented to IDEM upon request to ensure the rule is not violated. As an alternative, the Permittee may utilize all compliant coatings which would eliminate the daily record keeping requirement. There is no change to this condition due to this comment.

#### Comment 21:

Condition D.1.10(b), page 34 of46 (comment received September 23):

This condition should be deleted because it imposes daily recordkeeping for individual units that is excessive, unreasonable and unduly burdensome. To the extent that recordkeeping is deemed necessary, the Permittee should only be required to maintain monthly records of the material usage for the individual manufacturing processes within the subassembly activities. Average daily usages could then be calculated from the monthly records.

Condition D.1.10(b), page 34 of46 (follow-up comment received December 5, 2002):

As stated in Comment 18, each Area, CSA-1, CFF, A1SA, A1FF, A2SA, and A2FF, does not have the potential to use 5 gallons of coating per day based on a 24 hour work day. Because none of these Areas could possibly exceed the 5 gallon per day limit based on potential usage, it is impossible for it to exceed the limit based on actual usage. Therefore, requiring Four Winds to record daily VOC usage to document that fact is unnecessary and unduly burdensome. For this reason, the requirement for daily VOC usage recordkeeping contained in Condition D.1.10(b) should be deleted.

## **Response to Comment 21:**

In order to meet the particulate emission limitation requirements of 326 IAC 6-3-2(d) for its surface coating manufacturing processes, the Permittee must comply with Condition D.1.9 and limit the specified process coating usages to less than five (5) gallons per day. Presently, the Permittee does not utilize coatings in actual amounts that exceed this applicability threshold; however, the coatings used at a source can change at any time, along with the respective solids contents. Since IDEM does not regulate each and every coating used at a source, the Permittee must demonstrate continued compliance with the non-applicability determination through record keeping of coating material usage. The Permittee can alternatively comply with the control device and overspray requirements of 326 IAC 6-3-2(d)(1) and (2); however, for the purposes of this approval, the Permittee must demonstrate compliance with the stated daily usage limits. Compliance with the usage limits is demonstrated through the requisite record keeping requirement of Condition D.1.10(b), only for those non-exempt surface coating manufacturing processes occurring within each area. Those areas that do not have regulated surface coating manufacturing processes, as defined at 326 IAC 6-3-1, have no related daily record keeping requirement. There is no change to this condition due to these comments.

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## Comment 22:

Condition D.1.11, page 34 of 46:

As stated previously, quarterly reporting is excessive and unnecessary in light of the Permittee's operations. For that reason and to reflect other previously discussed revisions, the first sentence should be deleted and replaced with the following: "A semi-annual summary of the information to document compliance with Conditions D.1.1 and D.1.5 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the semi-annual period being reported."

#### **Response to Comment 22:**

See Response to Comment 13. There is no change to this permit due to this comment.

#### Comment 23:

Condition D.2.3, page 36 of 46 (comment received September 23):

Preventative Maintenance Plans are only required for control equipment. Therefore, this condition should be deleted and replaced with the following: "A Preventative Maintenance Plan, in accordance with Section B -Preventative Maintenance Plan, of this permit, is required for the control devices associated with CSA-2."

Condition D.2.3, page 36 of 46 (follow-up comment received December 5, 2002):

326 IAC 1-6-3(a) specifies the information that must be included in a Preventative Maintenance Plan (PMP) and all of the items identified in that regulation apply to emission control equipment. Therefore, IDEM's position that a PMP must address not only the emission control equipment but also the facility can not be correct because if it was, 326 IAC 1-6-3(a) would identify the information associated with the facility that must be included in the PMP and 326 IAC 1-6-3(a) contains no such language. Therefore, Preventative Maintenance Plans are only required for control equipment and this condition should be deleted and replaced with the following: "A Preventative Maintenance Plan, in accordance with Section B – Preventative Maintenance Plan, of this permit, is required for the control devices associated with CSA-2."

#### **Response to Comment 23:**

Pursuant to 326 IAC 2-8-5(9) (Permit Content), the FESOP must have a provision that requires the source to maintain on-site the PMP as described in 326 IAC 1-6-3. Pursuant to 326 IAC 1-6-3(a), the requirements for a PMP apply to "any person responsible for operating any facility specified in 326 IAC 1-6-1". As such, operation of an emission control device is not the criteria for applicability to 326 IAC 1-6-3. However, should a subject facility have an associated control device, the PMP must include the information relating to the emission control device as required by the rule. The PMP requirement is correctly applied to CSA-2 and its associated control devices, and there is no change to this permit due to this comment.

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#### Comment 24:

#### Condition D.2.4, page 36 of 46:

Control equipment should only be required if it is necessary to comply with an emission limit and the emission unit is venting to the atmosphere. Therefore, this condition should be deleted and replaced with the following: "If necessary to comply with D.2.1 and D.2.2, the two (2) cyclones and bag dust collector for PM and PM-10 control to facility CSA-2 shall be in operation and control emissions at all times that CSA-2 woodworking equipment is in operation and venting to the atmosphere."

#### **Response to Comment 24:**

The Permittee must utilize the listed control equipment in order to comply with the allowable particulate emission limit of 326 IAC 6-3-2(e). This is demonstrated on page 19 of 20 of TSD, Appendix A. Therefore, there is no change to the condition and the Permittee shall continue to operate the control equipment as required in the permit.

#### Comment 25:

#### Forms:

Revise the title of the forms currently identified as quarterly reporting forms to semi-annual reporting forms to be consistent with previously identified comments.

#### **Response to Comment 25:**

See Response to Comment 13. There is no change to this permit due to this comment.

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Upon further review, and in addition to the Comments/Responses presented above, the OAQ has decided to make the following changes to the FESOP renewal (changes in bold and strikeout for emphasis):

1. A general telephone number is added to Section A.1 of the permit:

#### A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary motor home/recreational vehicle manufacturing source.

Authorized Individual: Jeff Kime, President

Source Address: 701 County Road 15, Elkhart, Indiana 46515-1486 Mailing Address: P.O. Box 1486, Elkhart, Indiana 46515-1486

**General Source Phone:** (574) 266-1111

SIC Code: 3716 County Location: Elkhart

County Status: Attainment for all criteria pollutants

Source Status: Federally Enforceable State Operating Permit (FESOP)

Minor Source, under PSD Rules;

Minor Source, Section 112 of the Clean Air Act

2. Clarifying language is inserted at Condition B.3 to indicate that the permit term begins on the date of issuance:

## B.3 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

- 3. Since Condition B.8(c) already addresses confidentiality, the last sentence of paragraph (b) is revised to remove the statement about confidential information, and paragraph (c) is updated for clarity. Also, the condition is revised to change a rule reference. Paragraph (c) references 326 IAC 17. This rule was repealed by the Air Pollution Control Board on January 26, 2000, and the new rule reference has been added. The condition is updated as follows:
- B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]
  - (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit. or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]

- (c) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.
- 4. The requirement to include emergencies in the Quarterly Deviation and Compliance Monitoring Report is moved from B.15(c) and placed at B.14(h). Also, the statement at the end of B.14(b)(4) is removed since this is repeated at B.14(f). The affected paragraphs at Both B.14 and B.15 are revised as follows:

## B.14 Emergency Provisions [326 IAC 2-8-12]

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and the IDEM Northern Regional Office, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance

Section) or,

Telephone No.: 317-233-5674 (ask for Compliance Section)

Facsimile No.: 317-233-5967

Telephone No.: 1-800-753-5519 (IDEM Northern Regional Office) Facsimile No.: 219-245-4877 (IDEM Northern Regional Office)

Failure to notify IDEM, OAQ, and the IDEM Northern Regional Office, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

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- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]
  - (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.
- 5. Condition B.18 is revised to replace "should" with "shall" in paragraph (b).
- B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]
  - (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis. Indiana 46206-6015

Any such application should shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- 6. Condition B.23 specifies that nonpayment of annual fees may result in revocation of the permit. This is not specified in 326 IAC 2-8; therefore, the appropriate rule cite of 326 IAC 2-1.1-7 is added to B.23. Also, the section and phone number of who the Permittee can contact is corrected in paragraph (c).
- B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]
  - (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 4320 (ask for OAQ, Technical Support and Modeling Section I/M & Billing Section), to determine the appropriate permit fee.
- 7. Condition C.2 is revised for greater clarity and consistency with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), which was revised from 326 IAC 6-3 (Process Operations) and became effective on June 12, 2002. As of the date this permit is being issued these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the condition also cites the existing rule approved into the SIP until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action.
- C.2 Particulate Emission Limitations For Manufacturing Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P] [326 IAC 6-3-2(e-)]
  - Pursuant to 326 IAC 6-3-2(e)(2) 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any manufacturing process not exempt by 326 IAC 6-3-1 or already regulated by 326 IAC 6-3-2(b) through (d) 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

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(b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

(Note: OAQ also received follow-up comment on December 5, 2002 from Bruce Carter Associates, L.L.C., on behalf of Four Winds International, Inc., in relation to this change to Condition C.2, as follows:

IDEM's revisions to C.2(a) do not accurately reflect the intent of the former 326 IAC 6-3. As IDEM knows, there has been considerable debate over time regarding the applicability of 326 IAC 6-3 to processes with a process rate of less than 100 pounds. In addition, assuming the former version of 326 IAC 6-3 applied to processes with a process rate of less than 100 pounds, IDEM historically has taken different positions regarding the associated applicable emission rate. In some cases, it took the position that an emission rate of 0.551 pounds per hour applied to all processes with process rates less than 100 pounds per hour and in other cases it calculated an emission rate that was less than 0.551 pounds per hour based on the process rate. Therefore, stating 40 CFR 52, Subpart P, requires processes with a rate of less than 100 pounds per hour to meet an emission rate of 0.551 pounds per hour is incorrect and misleading. To the extent IDEM must reference 40 CFR 52, Subpart P, it should accurately state what the rule says.

Response to this comment: IDEM, OAQ, believes the revisions to C.2(a) do accurately reflect the intent of the former 326 IAC 6-3. IDEM, OAQ, has provided both citations in this condition to ensure that any affected emissions unit or process with a process weight rate of less than 100 pounds per hour is limited to the applicable allowable particulate emission rate of 0.551 pounds per hour. This includes processes regulated under previous 326 IAC 6-3-2(c), which is now revised at 326 IAC 6-3-2(e), and processes otherwise affected by the new rule that are not regulated under new 326 IAC 6-3-2(e). Until such time as the entire revision to 326 IAC 6-3 is approved by EPA into the Indiana SIP, the citation for the previous rule will remain as 40 CFR 52 Subpart P. Such will continue to ensure that relatively small processes with process weight rates of less than 100 pounds per hour will be limited to an allowable particulate emission rate of 0.551 pounds per hour. There are no changes to this condition beyond those indicated above).

- 8. Condition C.9(e) is revised to correct the rule cite as follows:
- C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]
  - (e) Procedures for Asbestos Emission Control
    The Permittee shall comply with the applicable emission control procedures in 326 IAC
    14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-41 emission control requirements
    are applicable for any removal or disturbance of RACM greater than three (3) linear feet
    on pipes or three (3) square feet on any other facility components or a total of at least
    0.75 cubic feet on all facility components.

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9. Condition C.11 is revised to state what OAQ does when stack testing, monitoring, or reporting is required to assure compliance with applicable requirements:

#### C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements **by issuing an order under 326 IAC 2-1.1-11.** Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

- 10. Condition C.15(e) is revised to correct the rule cite to reflect the FESOP rules instead of the Part 70 rules.
- C.15 Compliance Response Plan Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]
  - (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- 11. Condition C.17(a) is revised to clarify the reporting date. There is no change to C.17(b).

### C.17 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

(a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received **by April 15 of each year** in accordance with the compliance schedule specified in 326 IAC 2-6-3, and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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12. Condition D.1.7 is revised to add the appropriate rule citations and use language more

#### D.1.7 Volatile Organic Compounds (VOC) [326 IAC 8-1-2][326 IAC 8-1-4]

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consistent with these citations:

Compliance with the VOC usage and emission limitations contained in Conditions D.1.1, D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

(Note: OAQ also received follow-up comment on December 5, 2002 from Bruce Carter Associates, L.L.C., on behalf of Four Winds International, Inc., in relation to this change to Condition D.1.7, as follows:

Four Winds would agree to show compliance with the cited Conditions by using "formulation data supplied by the coating manufacturer" but to change the requirement to a specific IDEM format, "as supplied" and "as applied" VOC data sheets and require Four Winds to either prepare or obtain these documents, adds an additional level of record keeping that would result in no positive environmental benefit. Currently, coating manufacturers are required to supply copies of Material Safety Data Sheets, MSDS, and, in the case of wood furniture surface coatings, a copy of the Certified Product Data Sheet for all coatings supplied. Four Winds uses this information to calculate emissions on a monthly basis to show compliance with appropriate permit conditions. This information is on site and available to IDEM inspectors as needed. To require Four Winds to prepare or obtain copies of the "as supplied" and "as applied" VOC data sheets is unnecessary and unduly burdensome. Four Winds requests that this Condition be changed back to the original version proposed during the Public Notice.

Response to this comment: When a permit application is submitted for a surface coating operation, the applicant is required to submit "as supplied" and "as applied" VOC data sheets that are based coating manufacturer's data. Since a source may change its coatings after initial permit application submittal, IDEM, OAQ, does not feel that it is burdensome or unreasonable for the source to maintain such VOC data sheets upon coating changes. This requirement will ensure that all coatings are appropriately documented based on vendor data, and that the source can readily demonstrate continued compliance with relevant VOC usage and/or emission limitations based on such data. There are no changes to this condition beyond those indicated above.)

13. Previously, the terms "particulate" and "particulate matter" were both used in the 326 IAC 6-3, but revisions were made to the rule which became effective on June 12, 2002 that included using the term "particulate" is used consistently in 326 IAC 6-3. Condition D.2.4 is revised accordingly:

## D.2.4 Particulate Matter (PM) and PM-10 Control

In order to comply with D.2.1 and D.2.2, the two (2) cyclones and bag dust collector for <del>PM</del> **particulate** and PM-10 control to facility CSA-2 shall be in operation and control emissions at all times that CSA-2 woodworking equipment is in operation.

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14. Condition D.1.10 is revised (with changes from Responses to Comments 14 and 18 included) to clarify that the records taken to demonstrate compliance with the input usage limits of Conditions D.1.1 and D.1.2(a) for VOC emissions, and D.1.5 for HAP emissions, must be available within 30 days of the end of each compliance period (i.e., month).

### D.1.10 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 through D.1.4, the Permittee shall maintain records in accordance with (1) through (8) below. Records maintained for (1) through (8) shall be taken monthly, except where noted, and shall be complete and sufficient to establish compliance with the VOC usage limits and emission limits established in Conditions D.1.1 through D.1.4, and the HAP usage limits established in Condition D.1.5. Records taken to demonstrate compliance with Conditions D.1.1, D.1.2(a), and D.1.5 shall be available to IDEM, OAQ, within 30 days of the end of each compliance period.
  - (1) The VOC and HAP content of each coating material and solvent used.
  - The amount of coating material and solvent less water used on a monthly basis at each of facilities CSA-1, CFF, CUA, A1SA, A1FF, A2SA or A2FF.
    - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
    - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents. Records of used solvent sent off site as waste shall be maintained when such is included in a demonstration of compliance with D.1.1 through D.1.5.
  - (3) Method of application for all wood furniture coatings used;
  - (4) Daily VOC emitted at each of facilities CSA-1, CFF, CUA, A1SA, A1FF, A2SA and A2FF, when coating metal parts and a log of the dates of emissions;
  - (5) Monthly VOC usage at each of the six (6) facilities CSA-1, CFF, A1SA, A1FF, A2SA and A2FF, and total combined VOC usage to Class C, Class A Line 1, and Class A Line 2 production;
  - (6) Monthly individual and total HAP usage at Class C, Class A Line 1, and Class A Line 2 production combined;
  - (7) The weight of VOCs emitted from each of the six (6) facilities, and the total VOC emitted for the three product lines, for each compliance period. This shall exclude the weight of VOCs emitted due to wood furniture/cabinet coatings regulated at Condition D.1.4; and
  - (8) The weight of individual and total HAPs emitted from Class C, Class A Line 1, and Class A Line 2 production combined, for each compliance period.

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(b) To document compliance with Condition D.1.9, the Permittee shall maintain records of daily coating usage at each of facilities CSA-1, CFF, CUA, A1SA, A1FF, A2SA and A2FF.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

# Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) Renewal

## **Source Background and Description**

Source Name: Four Winds International, Inc.
Source Location: 701 CR 15, Elkhart, IN 46516

County: Elkhart SIC Code: 3716

Operation Permit No.: F039-14036-00220 Permit Reviewer: Michael Hirtler / EVP

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from Four Winds International, Inc. relating to the operation of a motor home/recreational vehicle manufacturing source. Four Winds International, Inc. was issued FESOP F039-5814-00220 on December 9, 1996.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

Three (3) motor home production lines as follows:

- (a) One (1) Class C Line, producing a maximum of 2.5 units per hour, installed in January 1992, consisting of the following:
  - (1) Sub-assembly area coating operations, identified as CSA-1, consisting of:
    - (A) hand, roll, bead, aerosol, high volume low pressure (HVLP) spray, and cup gun spray application of miscellaneous coatings and adhesives applied to metal, wood construction materials, pre-finished wood cabinets and counter tops, plastic, and fiberglass product parts during motor home assembly, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.
  - (2) Final finish area coating operations, identified as CFF, consisting of:
    - (A) hand, aerosol, cup gun spray, and pressure pot spray application of miscellaneous coatings applied to metal, wood construction materials, pre-fabricated cabinets and counter tops, and fiberglass parts during motor home finishing and touch-up, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.

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(3) Sub-assembly area woodworking operations, identified as CSA-2, using 1,267 pounds of wood per hour, with particulate matter emissions controlled by one (1) cyclone with bag dust collector exhausting within the building and one (1) cyclone dust collector exhausting to the atmosphere.

- (b) One (1) Class A Line 1, producing a maximum of 2 units per hour, installed in June 1999, consisting of the following:
  - (1) Sub-assembly area coating operations, identified as A1SA, consisting of:
    - (A) hand, roll, bead, aerosol, high volume low pressure (HVLP) spray and airless spray application of miscellaneous coatings and adhesives applied to metal, wood construction materials, pre-finished wood cabinets and counter tops, plastic, and fiberglass product parts during motor home assembly, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.
  - (2) Final finish area coating operations, identified as A1FF, consisting of:
    - (A) hand, aerosol, high volume low pressure (HVLP) spray, and airless spray application of miscellaneous coatings applied to metal, wood construction materials, pre-fabricated cabinets and counter tops, and fiberglass parts during motor home finishing and touch-up, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.
  - (3) Sub-assembly area production operations, including foam insulation cutting and woodworking operations for both Class A Lines 1 and 2, identified as ASA, using 300 pounds of foam insulation and 1,460 pounds of wood per hour, with particulate matter emissions controlled by two (2) cyclones and bag filter, identified as C3, exhausting within the building.
- (c) One (1) Class A Line 2 (Diesel Pusher Production Line), producing a maximum of 0.375 units per hour, installed in 2002, consisting of the following:
  - (1) Sub-assembly area coating operations, identified as A2SA, consisting of:
    - (A) hand, roll, bead and aerosol application of miscellaneous coatings and adhesives applied to metal, wood construction materials, pre-finished wood cabinets and counter tops, plastic, and fiberglass product parts during motor home assembly, with emissions exhausting fugitively into the building; and
    - (B) hand and aerosol application of miscellaneous solvents and cleaners.

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(2) Final finish area coating operations, identified as A2FF, consisting of:

- (A) hand and aerosol application of miscellaneous coatings applied to metal, wood construction materials, pre-fabricated cabinets and counter tops, and fiberglass parts during motor home finishing and touch-up, with emissions exhausting fugitively into the building; and
- (B) hand and aerosol application of miscellaneous solvents and cleaners.

### Permitted Emission Units and Pollution Control Equipment Removed from the Source

The source also consists of the following permitted emission units and pollution control devices that have been removed from service during this renewal review:

one (1) service and chassis coating area with a maximum throughput of 4.5 metal frames per hour and consisting of one (1) high volume low pressure (HVLP) spray operation identified as SC1, utilizing two (2) spray guns identified as SG3-1 and SG3-2, and dry filters for overspray control, exhausting through F-3-1.

This facility, which was approved under First Significant Permit Revision No. 039-10568, issued on June 8, 1999, has been dismantled and removed from the source during this review process.

#### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

#### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas fired combustion units with heat input capacities equal to or less than ten million (10,000,000) BTU per hour, itemized as follows:
  - (1) Building 650 includes twenty-five (25) 0.10 MMBtu per hour infrared tube heaters, four (4) 0.4 MMBtu per hour thermo cyclers, five (5) 0.3 MMBtu per hour gas fired unit furnaces, one (1) 0.4 MMBtu per hour air make up gas fired furnace, one (1) 2.64 MMBtu per hour air make up gas fired furnace, one (1) 0.15 MMBtu per hour barrel gas fired furnace, one (1) 0.1 MMBtu per hour gas fired unit furnace, three (3) 0.25 MMBtu per hour gas fired unit furnaces, one (1) 0.33 MMBtu per hour gas fired unit furnaces.
  - (2) Building 651 includes one (1) 0.13 MMBtu per hour down draft gas fired furnace, three (3) 0.1 MMBtu per hour gas fired furnaces, and one (1) 0.24 MMBtu per hour gas fired furnace.
  - (3) Building 653 includes one (1) 0.12 MMBtu per hour down draft gas fired furnace, one (1) 0.4 MMBtu per hour thermo cycler, two (2) 0.12 MMBtu per hour infrared tube heaters, and one (1) 1.0 MMBtu per hour air make up gas fired furnace.

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(4) Building 654 includes two (2) 0.55 MMBtu per hour air make up gas fired furnaces, eleven (11) 0.12 MMBtu per hour infrared tube heaters, four (4) 0.4 MMBtu per hour thermo cyclers, one (1) 0.49 MMBtu per hour air make up gas fired furnace, one (1) 0.03 MMBtu per hour gas fired unit furnace, two (2) 0.06

(b) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;

MMBtu per hour gas fired unit furnaces, and one (1) 0.1 MMBtu per hour gas

- (c) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs:
- (d) Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs;
- (e) Paved and unpaved roads and parking lots with public access;
- (f) The following VOC and HAP storage containers:

fired unit furnace.

Vessels storing lubricating oils, hydraulic oils, machining oils and machining fluids;

- (g) Application of oils, greases, lubricants or other non-volatile materials applied as temporary protective coatings;
- (h) Cleaners and solvents characterized as:

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- (1) Having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38EC (100EF) or;
- (2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (i) Emergency generators as follows:

Reciprocating engines not exceeding 16,000 horsepower, consisting of:

- (1) one (1) 144 hp natural gas fired reciprocating engine; and
- (2) one (1) 80 hp natural gas fired reciprocating engine.
- (j) Other activities and categories with PM/PM10 emissions below the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day:
  - (1) miscellaneous woodworking at Class A Line 1 subassembly, using 425 pounds of wood per hour, exhausting fugitively within the building;
  - (2) hand routing at Class A Line 1, using up to 500 pounds of prefabricated fiberglass reinforced plastic (FRP) parts per hour, utilizing a cyclone (C4) as particulate matter control and exhausting within the building.

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(3) steel and aluminum tube plasma/torch cutting and welding at Class C Line, using a maximum of 75 pounds of welding wire per hour and exhausting within the building;

- (4) steel and aluminum tube plasma/torch cutting and welding at Class A Line 1, using a maximum of 75 pounds of welding wire per hour and exhausting within the building; and
- (5) wood trim cutting at Class A Line 1 final finish area, using up to 10 pounds of wood per hour, utilizing a cyclone with bag filter (C3) as particulate control and exhausting within the building.
- (k) Other activities and categories with negligible PM/PM10 emissions:
  - (1) steel and aluminum tube cutting at Class A Line 1, respectively sawing up to 63 and 130 linear feet per hour at an average thickness less than one (1) inch, with deposition of metal shavings in the building; and
  - (2) seven (7) portable dust collectors, as a trivial activity, used at this source to control particulate matter emissions from the facilities and activities listed herein.

### **Existing Approvals**

- (a) FESOP F039-5814-00220, issued on December 9, 1996;
- (b) First Administrative Amendment No. 039-8246, issued on October 14, 1997;
- (c) Second Administrative Amendment No. 039-9038, issued on November 10, 1997;
- (d) Third Administrative Amendment No. 039-9208, issued on December 3, 1997;
- (e) Fourth Administrative Amendment No. 039-9861, issued on July 8, 1998; and
- (f) First Significant Permit Revision No. 039-10568, issued on June 8, 1999.
- (g) First Minor Permit Revision No. 039-15345, issued on February 27, 2002.

All conditions from previous approvals were incorporated into this FESOP, except the following changes have been made:

(a) FESOP 039-5814-00220, issued on December 9, 1996:

#### D.2.1 Particulate Matter

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter emissions from the woodworking operations in Class C subassembly area 2 shall not exceed 3.02 pounds per hour. Pursuant to Construction Permit 039-3373-00220, the particulate matter from the woodworking facilities in Class C subassembly area 2 shall be considered in compliance with 6-3, in lieu of a stack test, provided that:

- a) visible emissions do not exceed 10% opacity; and
- b) fugitive dust complies with 326 IAC 6-4.

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Reason changed: Paragraphs (a) and (b) of Condition D.2.1 have been eliminated. Paragraph (a) is inconsistent with current OAQ requirements for woodworking facilities which requires 326 IAC 6-3-2 compliance be demonstrated through daily visible emission notations, as made by a trained employee, and through parametric monitoring. Since both requirements are included in the renewed permit, and since the opacity requirements for the source are established at Condition C.3, paragraph (a) is removed. Paragraph (b) is redundant and is eliminated since this requirement, which applies sourcewide, is established as Condition C.6.

(b) First Significant Permit Revision No. 039-10568, issued on June 8, 1999.

#### D.4.7 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the service and chassis Paint Booth SC1 are in operation.

### D.4.9 Particulate Matter Overspray

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack F-3-1 while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

## D.4.10 Volatile Organic Compound (VOC) Usage

(b) To document compliance with Condition D.4.8, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventative Maintenance Plan.

Reason changed: The source has removed facility SC1, the service and chassis coating operation. Conditions D.4.7, D.4.9, and D.4.10(b) specifically relate to this facility and are consequently obsolete. They are therefore deleted from the permit.

(c) First Minor Permit Revision No. 039-15345, issued on February 27, 2002.

Reason changed: Section D of the minor permit revision contains eight (8) different sections, many of which contain identical or similar requirements for the various operations at this source. A general reformatting of the facilities and Section D has been done in this renewal to combine those activities and facilities that have similar or identical requirements (e.g., list all coating operations together in one D section, and list all non-coating operations together in another D section).

#### **Enforcement Issue**

There are no enforcement actions pending.

#### Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP Renewal application for the purposes of this review was received on March 7, 2001. Additional information was received on December 27, 2001.

There was no notice of completeness letter mailed to the source.

#### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (twenty (20) pages).

#### **Unrestricted Potential Emissions**

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM	greater than 100, less than 250
PM-10	greater than 100, less than 250
SO <sub>2</sub>	less than 100
VOC	greater than 250
CO	less than 100
NO <sub>x</sub>	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

LIAD!-	Determination To Free it (to me have an)
HAP's	Potential To Emit (tons/year)
xylene	less than 10
methyl ethyl ketone (MEK)	less than 10
toluene	greater than 10
methyl isobutyl ketone (MIBK)	less than 10
ethyl benzene	less than 10
glycol ethers	less than 10
methanol	less than 10
hexane	less than 10
TOTAL	greater than 25

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10 and volatile organic compounds (VOC) is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

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(b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) the combination of HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

## (c) Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD applicability.

#### Potential to Emit After Issuance

The source, issued a FESOP on December 9, 1996, has opted to remain a FESOP source, rather than apply for a Part 70 Operating Permit. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of this Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

		Lin	nited Poter	ntial to Emit (	(tons/year)		
Process/facility	PM <sup>(1)</sup>	PM-10 <sup>(1)</sup>	SO <sub>2</sub>	VOC	СО	NO <sub>x</sub>	HAPs
Class A - Line 1; Class A - Line 2; and Class C coating operations (Sub-assembly & Final Finish)	30.80	30.80	0.00	<99.5 <sup>(2)</sup>	0.00	0.00	<10 <sup>(3)</sup>
Class A - Line 1&2 Sub-assembly Area woodworking & foam cutting (ASA)	16.48	16.48	0.00	0.00	0.00	0.00	0.00
Class C Sub-assembly Area woodworking (CSA-2)	13.23	13.23	0.00	0.00	0.00	0.00	0.00
Class A - Line 1 subassembly miscellaneous woodworking <sup>(5)</sup>	6.35	6.35	0.00	0.00	0.00	0.00	0.00
Class A - Line 1 final finish wood trim cutting (5)	2.41	2.41	0.00	0.00	0.00	0.00	0.00
Class A - Line 1 fiberglass machining (5)	7.10	7.10	0.00	0.00	0.00	0.00	0.00
Class A - Line 1 steel & aluminum tube welding <sup>(5)</sup>	2.41	2.41	0.00	0.00	0.00	0.00	negl.
Class C steel & aluminum tube welding (5)	2.41	2.41	0.00	0.00	0.00	0.00	negl.
source-wide natural gas combustion (5)	0.15	0.60	0.02	0.46	5.49	8.83	negl.
Total After Issuance	81.34	81.79	0.00	<100	5.49	8.83	<25 <sup>(4)</sup>

#### Notes:

- Except for surface coating, PM emission rates reflect 326 IAC 6-3-2 allowable emission rate (lb/hr), extrapolated on an
  equivalent annual basis assuming 8,760 hours of operation. Surface coating PM reflects uncontrolled emissions.
  PM10 conservatively set equal to PM for all processes except combustion.
- 2. Based on Condition D.1.1.
- 3. Reflects limited emissions for a single hazardous air pollutant.
- 4. Reflects limited emissions for total hazardous air pollutants.
- 5. Insignificant activity.

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## **County Attainment Status**

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
СО	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) is a precursor for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as attainment or unclassifiable for ozone.

#### **Federal Rule Applicability**

There are no new federal rules applicable to the source during this FESOP renewal review process. The applicability determination that follows is based on that conducted for the original FESOP F039-5814-00220, issued December 9, 1996:

(a) 40 CFR Part 60, Subparts K, Ka, and Kb (Standards of Performance for Petroleum Liquid Storage Vessels and Volatile Liquid Storage Vessels)

The insignificant activity identified as "a gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons" is still not subject to the New Source Performance Standards, 326 IAC 12, (40 CFR Parts 60.110, 110a - 115a or 110b - 117b, as Subparts K, Ka, and Kb, respectively) since the storage capacity associated with this activity is below the minimum applicable threshold to the three rules, 40 cubic meters (10,568 gallons).

There are still no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) (1) 40 CFR Part 63, Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations)

This source is still not subject to the NESHAP for source categories, 326 IAC 20-14, (40 CFR 63, Subpart JJ), *National Emission Standards for Wood Furniture Manufacturing Operations*, for its wood furniture coating processes since the source is not a major source of hazardous air pollutants pursuant to 40 CFR Part 63.2. The source shall limit coating material usage such that source-wide single and combined HAP emissions are limited to less than 10 tpy and 25 tpy, respectively. Therefore this rule does not apply to the source.

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(2) The United States Environmental Protection Agency (US EPA) has established the *Miscellaneous Metal Part and Products (Surface Coating)* source category as requiring hazardous air pollutant control and has tentatively established May 2002 as the final rule promulgation date. As a FESOP source, this plant will not be subject to the pending NESHAP for source categories, 326 IAC 20, (40 CFR 63, Subpart MMMM), *National Emission Standards for Miscellaneous Metal Part and Products*, for its metal parts coating processes since the source is not a major source of hazardous air pollutants pursuant to 40 CFR Part 63.2.

There are still no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 40 CFR Part 61, and 326 IAC 20 and 40 CFR Part 63) applicable to this source category.

#### State Rule Applicability - Entire Source

There are no new state rules applicable to the source during this FESOP renewal review process. The applicability determination that follows is based on that conducted for the original FESOP F039-5814-00220, issued December 9, 1996:

## 326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration, PSD)

Pursuant to 326 IAC 2-2 and 40 CFR 52.21 (PSD), this source, constructed after 1980, is still not considered a major source. This source is not one of the 28 listed source categories and it does not have the potential to emit of 250 tons per year or more of any criteria pollutant after federally enforceable controls and limits, as shown in the *Potential to Emit After Issuance* table on page 8 of 17. Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 (Prevention of Significant Deterioration, PSD) are not applicable.

### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC and it is located in Elkhart County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

#### 326 IAC 2-8 (FESOP Program)

Pursuant to this rule, the amount of PM-10 and VOC shall still be limited to less than one hundred (100) tons per year, and single and combined HAPs shall still be limited to less than 10 and 25 tons per year, respectively. Specifically, the source shall comply as follows:

- (a) The total combined VOC input to the Class C, Class A Line 1, and Class A Line 2 production lines, including but not limited to the usage of sealants, bonding materials, adhesives, caulks, wood stains, paints and VOC solvents, shall be limited to 99.5 tons per twelve (12) consecutive month period. This usage limit is required to limit the sourcewide potential to emit of VOC to less than 100 tons per year.
- (b) The total combined input usage of any single hazardous air pollutant (HAP) to the Class C, Class A Line 1, and Class A Line 2 production lines shall be limited to less than 10 tons per twelve (12) consecutive month period. Compliance with this condition shall limit the source-wide potential to emit a single HAP to less than 10 tons per twelve (12) consecutive month period.

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(c) The total combined input usage of all hazardous air pollutants (HAPs) to the Class C, Class A - Line 1, and Class A - Line 2 production lines shall be limited to less than 24.8 tons per twelve (12) consecutive month period. Compliance with this condition shall limit the source-wide potential to emit total HAPs to less than 25 tons per 12 consecutive month period.

- (d) The PM-10 emissions from Class C Line woodworking operations CSA-2 shall not exceed 4.763 pounds of PM-10 emitted per ton of wood processed. This is equivalent to 3.02 pounds of PM-10 per hour, based on a maximum throughput of 0.634 tons (i.e., 1,267 pounds) of wood per hour.
  - (2) The PM-10 emissions from Class A Lines 1 and 2 foam insulation cutting and woodworking operations ASA shall not exceed 4.273 pounds of PM-10 emitted per ton of foam and wood processed. This is equivalent to 3.76 pounds of PM-10 per hour, based on a maximum throughput of 0.880 tons (i.e.,1,760 pounds) of foam and wood per hour.

Compliance with this condition shall limit the source-wide potential to emit of PM-10 to less than 100 tons per twelve (12) consecutive month period.

Compliance with these limitations shall make the requirements of 326 IAC 2-7 (Part 70) not applicable to the source. Compliance with these limitations shall also make the requirements of 326 IAC 2-2 and 40 CFR 52.21, Prevention of Significant Deterioration (PSD), not applicable.

#### 326 IAC 5-1 (Visible Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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## State Rule Applicability - Individual Facilities

There are no new state rules applicable to the source during this FESOP renewal review process. The applicability determination that follows is based on that conducted for the original FESOP F039-5814-00220, issued December 9, 1996:

#### 326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the PTE 10 tons per year of any HAP or 25 tons per year of the combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). For this source, surface coating operations were installed in 1992, 1999 and 2002 for the Class C, Class A - Line 1 and Class A - Line 2 motor home assembly lines, respectively. While the two (2) Class A lines were constructed after the July 1997 rule applicability date, the source shall limit the total usage of any single HAP to less than 10 tons per twelve (12) consecutive month period and the total combination of HAPs to less than 25 tons per 12 consecutive month period. Therefore, the requirements of 326 IAC 2-4.1-1 do not apply.

#### 326 IAC 6-3-2 (Process Operations)

(a) On June 12, 2002, revisions to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) became effective; this rule was previously referred to as 326 IAC 6-3 (Process Operations). As of the date this permit is being issued these revisions have not been approved by EPA into the Indiana State Implementation Plan (SIP); therefore, the following requirement from the previous version of 326 IAC 6-3 (Process Operations), which has been approved into the SIP, will remain an applicable requirement until the revisions to 326 IAC 6-3 are approved into the SIP and the condition is modified in a subsequent permit action. Therefore, the source shall comply as follows:

Pursuant to 40 CFR 52 Subpart P and FESOP 039-5814-00220 issued on December 9, 1996, the particulate matter from the spray coatings applied at the Class C, Class A - Line 1, and Class A - Line 2 sub-assembly and final finish areas CSA-1, CFF, A1SA, A1FF, A2SA, and A2FF each shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

Under the rule revision, particulate from surface coating manufacturing processes shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications. The rule revision will also exempt sources from such requirements, provided that coating usage is less than five (5) gallons per day. Since surface coating manufacturing facilities CSA-1, CFF, A1SA, A1FF, A2SA, and A2FF each use less than five (5) gallons of coatings per day, exclusive of surface coatings that do not emit or have the potential to emit particulate, the facilities shall not be subject to the control device requirement. Compliance shall be verified through maintenance of daily coating usage records for each facility.

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(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emitted from the facilities listed below shall be limited as stated, based on the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where  $E =$  rate of emission in pounds per hour and  $P =$  process weight rate in tons per hour

Emission Unit/Activity	Process Weight Rate (lbs/hr)	Uncontrolled PM Emissions (lb/hr)	Control Efficiency %	Controlled PM Emissions (lb/hr)	Allowable Emissions (326 IAC 6-3-2) (lb/hr)
Class A - Line 1 * misc. woodworking	425	0.22	0%	0.22	1.45
Class A - Line 1&2 woodworking & foam cutting (ASA) controlled by cyclone/bag filter system	1,760	1.05	\$99%	0.01	3.76
Class C woodworking (CSA-2) controlled by cyclone/bag filter system	1,267	17.14	\$91%	1.540	3.02
Class A - Line 1 * routing of fiberglass parts controlled by cyclone/bag filter system	500	0.01	\$99%	<0.01	1.62

<sup>\*</sup> Insignificant Activity

PM emissions from these activities are in compliance with 326 IAC 6-3-2 by calculation (see Appendix A, pages 16 through 19 for details), and the source utilizes cyclones and bag filters for particulate matter control on several of the emission units as indicated. Except for the Class C woodworking area (CSA-2), there will be no PMP nor compliance monitoring conditions in the permit since the facilities/activities without a control device do not have actual emissions exceeding 25 tons per year, and the facilities/activities with a control device do not have an allowable PM emission rate exceeding 10 pounds per hour. Class C woodworking area CSA-2, however, will continue to comply with the applicable compliance monitoring requirements established in FESOP F039-5814, issued December 9, 1996, and subsequent approvals. No monitoring of pressure drop at the cyclone is required, pursuant to First Administrative Amendment No. 039-8246, issued October 14, 1997, since this approval indicated that installing a pressure gauge on the cyclone is not possible.

(c) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate matter emissions rate from any process which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. This includes the following equipment, as insignificant activities:

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- (1) steel and aluminum tube plasma/torch cutting and welding at Class C Line, using a maximum of 75 pounds of welding wire per hour and exhausting within the building:
- (2) steel and aluminum tube plasma/torch cutting and welding at Class A Line 1, using a maximum of 75 pounds of welding wire per hour and exhausting within the building;
- (3) wood trim cutting at Class A Line 1 final finish area, using up to 10 pounds of wood per hour, utilizing a cyclone with bag filter (C3) as particulate control and exhausting within the building.

There will be no compliance monitoring condition inserted into the permit since these insignificant activities either have no control device and do not have actual emissions exceeding 25 tons per year, or do not have allowable emissions for the controlled pollutant (i.e., PM) exceeding 10 pounds per hour.

#### 326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compound (VOC) emissions of 25 tons per year or more, and which are not otherwise regulated by another provision of Article 8. For this source, the surface coating equipment was installed in 1992, 1999 and 2002 for the Class C, Class A - Line 1 and Class A - Line 2 motor home assembly lines, respectively. Each production line is subject to the rule requirements of 326 IAC 8-2-12 when coating wood cabinets/furniture during product assembly (see discussion below). Class A - Line 2 facilities A2SA (sub-assembly area) and A2FF (final finish area) each have a potential to emit of VOC that is less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 do not apply to these facilities and records will be kept of VOC usage to verify this status.

Class A - Line 1 facilities A1SA and A1FF, and Class C Line facilities CSA-1 and CFF, each have a potential to emit of VOC greater than 25 tons per year. The VOC input to each of facilities A1SA, A1FF, CSA-1 and CFF, including but not limited to the usage of sealants, bonding materials, adhesives, caulks, wood stains, paints and VOC solvents, shall be limited to less than 25 tons per twelve (12) consecutive month period. The VOC usage for wood furniture/cabinet coating is not included in this determination since such usage is regulated at Condition D.1.4. Compliance with this requirement shall make the requirements of 326 IAC 8-1-6 not applicable to these four (4) facilities.

#### 326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to 326 IAC 8-2-1 (Applicability) and 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), facilities constructed after July 1, 1990 located in any county, and with actual VOC emissions of greater than fifteen (15) pounds per day before add-on controls, shall limit the VOC content of the applied coating to 3.5 pounds of VOCs per gallon of coating less water, for air dried coatings. The miscellaneous metal coating activities at each of the six (6) coating areas (i.e., facilities) at this source have *potential* VOC emissions of well below 15 pounds per day (see TSD Appendix A, pages 4 to 9 of 20). Therefore, the requirements of this rule do not apply to any of the facilities and records will be kept of VOC usage to verify this status.

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### 326 IAC 8-2-11 (Fabric and Vinyl Coating)

At the sub-assembly areas for the three (3) motor home production lines, the source prepares window coverings which consist of coating a wooden frame with tack adhesive and placing fabric onto the frame. Pursuant to 326 IAC 8-2-11(a), such a process does not meet the definition of fabric coating since the process is not imparting properties to the fabric not already there. Therefore, the requirements of 326 IAC 8-2-11 are not applicable. Also, since the coating is directly applied to the wood rather than the fabric, fabric is not listed as a material being coated in the equipment listing herein.

### 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

Pursuant to 326 IAC 8-2-1 (Applicability) and 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), facilities constructed after July 1, 1990 located in any county, and with actual VOC emissions of greater than fifteen (15) pounds per day before add-on controls, shall apply all coating materials, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, using one or more of the stated application systems.

This source uses pre-fabricated, *pre-finished*, wood cabinets in the construction of motor homes. To attach the cabinets to the motor homes, the source uses adhesives, as well as touch-up coatings for product finishing. The potential amount of VOC emitted from sub-assembly areas A1SA, A2SA, and CSA-1 each exceed 15 pounds per day, largely from adhesives usage. Although adhesives are applied to wood materials other than cabinetry (e.g., wood construction materials used to assemble the motor home frame), for purposes of this applicability determination, no distinction is made on the use of the wood and sub-assembly areas A1SA, A2SA, and CSA-1 are determined to be subject to the rule requirements. Also, final finish areas A1FF, A2FF, and CFF each have *potential* VOC emissions of less than 15 pounds per day of VOC and, therefore, the requirements of 326 IAC 8-2-12 do not apply to these facilities. However, the source will continue to use compliant wood coating application methods at these areas and has requested that the rule requirements be extended to each of the three (3) final finish facilities.

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), surface coatings applied to wood furniture and cabinets at sub-assembly areas A1SA, A2SA, and CSA-1, and final finish areas A1FF, A2FF, and CFF, shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

The source continues to use hand (brush or wipe), bead (airless), roller, aerosol and pressure spray (considered as airless) and HVLP spray application methods for all wood furniture coating operations. Therefore, the source will continue to comply with this rule. Records of application systems utilized shall continue to be maintained to verify this status.

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### 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

Pursuant to 326 IAC 8-4-1 (Applicability) and 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities), all petroleum liquid storage vessels with capacities greater than one hundred fifty thousand (150,000) liters (39,000 gallons) containing VOC whose true vapor pressure is greater than 10.5 kPa (1.52 psi) shall comply with the requirements for external fixed and floating roof tanks and the specified record keeping and reporting requirements. The insignificant activity identified as a gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons is not subject to the requirements of 326 IAC 8-4-3 since the storage tank is below the 39,000 gallon threshold for rule applicability.

326 IAC 8-4-6 (Gasoline Dispensing Facilities) and 326 IAC 8-4-9 (Leaks from Transports and Vapor Collection Systems)

Pursuant to 326 IAC 8-4-1 (Applicability), the requirements of 326 IAC 8-4-6 (Gasoline Dispensing Facilities), shall apply to any gasoline storage tank and dispensing facility, except dispensing facilities with a monthly throughput of less than ten thousand (10,000) gallons per month and that were in existence prior to July 1, 1989. As an insignificant activity, the gasoline fuel transfer and dispensing operation was installed at the source location at or before August 1985 and, based on available usage records supplied by the source, the actual throughput at the source is well below the 10,000 gallons per month applicability threshold. Therefore, these requirements do not apply to the source and the requirements of 326 IAC 8-4-9 (Leaks from Transports and Vapor Collection Systems) are likewise not applicable. The source shall maintain monthly records of the gasoline throughput at the dispensing facility and shall submit such records to OAQ upon request to demonstrate continued compliance with this determination.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties)
The requirements of this rule apply to stationary sources located in Lake, Porter, Clark and Floyd
Counties that emit or have the potential to emit VOCs at levels equal to or greater than 25 tons
per year in Lake and Porter Counties; 100 tons per year in Clark and Floyd Counties; and to any
coating facility that emits or has the potential to emit 10 tons per year or greater in Lake, Porter,
Clark or Floyd County. This source is located in Elkhart County. Therefore, this rule is not
applicable to this source.

## 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

Pursuant to 326 IAC 8-9-1, on and after October 1, 1995 stationary vessels used to store volatile organic liquids (VOL) must comply with the requirement of the rule if located in Clark, Floyd, Lake or Porter Counties. Stationary vessels with capacities less than 39,000 gallons are only subject to the reporting and record keeping requirements of the rule. This source is located in Elkhart County. Therefore, this rule is not applicable to this source.

## **Testing Requirements**

Compliance testing is not required of this source since the coating material usage and related VOC and volatile organic HAP emissions assume an emission factor of 2,000 pounds of pollutant emitted per ton of pollutant input to the coating operation, and the woodworking operations are controlled by baghouse and, along with other processes, have emissions below the relevant allowable particulate matter emission rates.

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#### **Compliance Requirements**

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

All compliance requirements from previous approvals were incorporated into this FESOP. The compliance monitoring requirements applicable to this source are as follows:

The Class C Sub-assembly woodworking operation CSA-2 has applicable compliance monitoring conditions as specified below:

- (a) Daily visible emission notations of the CSA-2 woodworking operation stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) An inspection shall be performed each calender quarter of the cyclone controlling woodworking operation CSA-2 when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

These monitoring conditions are necessary because the controls for the Class C woodworking operation must operate properly to ensure compliance with 326 IAC 5 (Visible Emission Limitations), 326 IAC 6-3 (Process Operations) and 326 IAC 2-8 (FESOP).

#### Conclusion

The renewed operation of this motor home/recreational vehicle manufacturing source shall be subject to the conditions of the attached proposed FESOP Renewal No. F039-14036-00220.

### Appendix A: Emissions Summary

Company Name: Four Winds International, Inc. Address City IN Zip: 701 CR 15, Elkhart, IN 46516

FESOP Renewal No.: 039-14036-00220 Reviewer: Michael Hirtler / EVP

Date: 11/14/02

#### **Uncontrolled Potential Emissions (tons/year)**

				Emissions Ger	erating Activity				
	Natural Gas	Surface Coating	Surface Coating	Surface Coating	Class A - Line 1	Class C	Class A - Line 1	Class C	
Pollutant	Combustion	Class A - Line 1	Class A - Line 2	Class C	Subassembly	Subassembly	Misc. Welding &	Misc. Welding &	Total
		Operations	Operations	Operations	Operations	Woodworking	Torch Cutting	Torch Cutting	
PM	0.15	0.96	0.21	1.20	5.73	75.09	1.98	1.98	87.3
PM10	0.60	0.96	0.21	1.20	5.73	75.09	1.98	1.98	87.7
SO2	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1
NOx	8.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.8
VOC	0.46	115.28	24.79	145.95	0.00	0.00	0.00	0.00	286.5
CO	5.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.5
HAPs	0.16	13.20	2.84	16.85	0.00	0.00	negl.	negl.	32.90 (total) 15.73 (toluene)

Total emissions based on rated capacity at 8,760 hours/year.

#### **Controlled Potential Emissions (tons/year)**

				Emissions Ger	nerating Activity				
	Natural Gas	Surface Coating	Surface Coating	Surface Coating	Class A - Line 1	Class C	Class A - Line 1	Class C	
Pollutant	Combustion	Class A - Line 1	Class A - Line 2	Class C	Subassembly	Subassembly	Misc. Welding &	Misc. Welding &	Total
		Operations	Operations	Operations	Operations	Woodworking	Torch Cutting	Torch Cutting	
PM	0.15	0.96	0.21	1.20	0.99	13.23	1.98	1.98	20.7
PM10	0.60	0.96	0.21	1.20	0.99	13.23	1.98	1.98	21.1
SO2	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1
NOx	8.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.8
VOC	0.46	<99.	5 (total coating activ	rities)	0.00	0.00	0.00	0.00	<100
CO	5.49		0.00	0.00	0.00	0.00	0.00	0.00	5.5
HAPs	0.16	<10 (single)	<10 (single)	<10 (single)	0.00	0.00	negl.	negl.	< 25 (total)

Total emissions based on rated capacity at 8,760 hours/year, after control and limitations (see Section D of this FESOP Renewal No. 039-14036-00220 for detailed limitations). Any single HAP emissions from surface coating operations sourcewide have been limited to less than 10 tpy.

Total HAP emissions from surface coating operations sourcewide have been limited to less than 25 tpy.

#### Appendix A: Emission Calculations **Natural Gas Combustion** MM BTU/HR <100

Company Name: Four Winds International, Inc. Address City IN Zip: 701 County Road 15, Elkhart, IN 46516 FESOP Renewal No.: 039-14036-00220

Reviewer: Michael Hirtler / EVP Date: 02/01/02

Combustion	Heat Capacity	No. of	Pot. Gas Thruput			on Factor in It				Potential Emission Rate in tons/year							
Unit Type	(MMBtu/hr)	Units	(MMCF/yr)	PM*	PM10*	SO2	NOx**	VOC	CO***	PM	PM10	SO2	NOx	VOC	CO		
Building 650																	
Infrared Tube Heater	0.10	25	22	1.9	7.6	0.6	94.0	5.5	40.0	0.02	0.08	0.01	1.03	0.06	0.44		
Thermocycler	0.40	4	14	1.9	7.6	0.6	100.0	5.5	84.0	0.02	0.05	0.00	0.70	0.06	0.44		
Gas Fired Unit Furnace	0.30	5	13	1.9	7.6	0.6	100.0	5.5	84.0	0.01	0.05	0.00	0.70	0.04	0.55		
Air Make-up Gas Furnace	0.40	1	4	1.9	7.6	0.6	100.0	5.5	84.0	0.00	0.03	0.00	0.00	0.04	0.55		
Air Make-up Gas Furnace	2.64	1	23	1.9	7.6	0.6	100.0	5.5	84.0	0.00	0.01	0.00	1.16	0.01	0.13		
Barrel Gas Fired Furance	0.15	1	1	1.9	7.6	0.6	94.0	5.5	40.0	0.02	0.09	0.00	0.06	0.00	0.97		
Gas Fired Unit Furnace	0.10	1	1	1.9	7.6	0.6	94.0	5.5	40.0	0.00	0.00	0.00	0.04	0.00	0.03		
Gas Fired Unit Furnace Gas Fired Unit Furnace	0.10	3	7	1.9	7.6	0.6	94.0	5.5	40.0	0.00	0.00	0.00	0.04	0.00	0.02		
					7.6												
Gas Fired Unit Furnace	0.33	1	3	1.9		0.6	100.0	5.5	84.0	0.00	0.01	0.00	0.14	0.01	0.12		
Gas Fired Unit Furnace	0.35	2	6	1.9	7.6	0.6	100.0	5.5	84.0	0.01	0.02	0.00	0.31	0.02	0.26		
Building 651																	
Down Draft Gas Fired Furnace	0.13	1	1	1.9	7.6	0.6	94.0	5.5	40.0	0.00	0.00	0.00	0.05	0.00	0.02		
Gas Fired Unit Furnace	0.10	3	3	1.9	7.6	0.6	94.0	5.5	40.0	0.00	0.01	0.00	0.12	0.01	0.05		
Gas Fired Unit Furnace	0.24	1	2	1.9	7.6	0.6	94.0	5.5	40.0	0.00	0.01	0.00	0.10	0.01	0.04		
Building 653																	
Down Draft Gas Fired Furnace	0.12	1	1	1.9	7.6	0.6	94.0	5.5	40.0	0.00	0.00	0.00	0.05	0.00	0.02		
Thermocycler	0.40	1	4	1.9	7.6	0.6	100.0	5.5	84.0	0.00	0.01	0.00	0.18	0.01	0.15		
Infrared Tube Heater	0.12	2	2	1.9	7.6	0.6	94.0	5.5	40.0	0.00	0.01	0.00	0.10	0.01	0.04		
Air Make-up Gas Furnace	1.00	1	9	1.9	7.6	0.6	100.0	5.5	84.0	0.01	0.03	0.00	0.44	0.02	0.37		
Building 654																	
Air Make-up Gas Furnace	0.55	2	10	1.9	7.6	0.6	100.0	5.5	84.0	0.01	0.04	0.00	0.48	0.03	0.40		
Infrared Tube Heater	0.12	11	12	1.9	7.6	0.6	94.0	5.5	40.0	0.01	0.04	0.00	0.54	0.03	0.23		
Thermocycler	0.40	4	14	1.9	7.6	0.6	100.0	5.5	84.0	0.01	0.05	0.00	0.70	0.04	0.59		
Air Make-up Gas Furnace	0.49	1	4	1.9	7.6	0.6	100.0	5.5	84.0	0.00	0.02	0.00	0.21	0.01	0.18		
Gas Fired Unit Furnace	0.03	1	0	1.9	7.6	0.6	94.0	5.5	40.0	0.00	0.00	0.00	0.01	0.00	0.01		
Gas Fired Unit Furnace	0.06	2	1	1.9	7.6	0.6	94.0	5.5	40.0	0.00	0.00	0.00	0.05	0.00	0.02		
Gas Fired Unit Furnace	0.10	1	1	1.9	7.6	0.6	94.0	5.5	40.0	0.00	0.00	0.00	0.04	0.00	0.02		
DI 15 0 1 ##	0.57		40	0.00004	0.0000	0.00050	4.00000	0.44000	0.04700	0.00	0.00	0.00	4.40	0.00	0.00		
Plant Emergency Generators***	0.57	2	10	0.00991	0.00999	0.00059	4.08000	0.11800	0.31700	0.00	0.00	0.00	1.16	0.03	0.09		
(144hp & 80 hp units)			400														
			166														
Uncontrolled Potential to Emit (tons	per year):									0.15	0.60	0.05	8.83	0.46	5.49		

### Methodology

- \*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

All emission factors are based on normal firing. MMBtu = 1,000,000 Btu MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput for each building combustion unit (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu Emission Factors for all units except generators from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-03-006-02, and 1-03-006-03 (SUPPL. D 7/98) Emission Factors for generators from AP 42, Chapter 3.2, Table 3.2-2 for 4-stroke lean burn engines (SUPPL. F 7/00) Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

<sup>&</sup>quot;\*Emission Factors for NOx: Uncontrolled = 94 for heat input capacity < 0.3 MMBtu/hr; = 100 for heat input capacity >>0.3 MMBtu/hr

\*Emission Factors for NOx: Uncontrolled = 40 for heat input capacity < 0.3 MMBtu/hr; = 84 for heat input capacity >>0.3 MMBtu/hr

\*\*The heat input rating for the emergency generators is based on a ratio that approximates heat input to power output of 2545.1 btu/hr / hp . Emergency generator potential to emit based on 500 hours per year operation.

## Appendix A: Emission Calculations Natural Gas Combustion MM BTU/HR <100

Company Name: Four Winds International, Inc.
Address City IN Zip: 701 County Road 15, Elkhart, IN 46516
FESOP Renewal No.: 039-14036-00220
Reviewer: Michael Hirtler / EVP
Date: 02/01/02

		HAPs - Organics			HAPs - Metals								
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Lead	Cadmium	Chromium	Manganese	Nickel	all HAPs		
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	(tons/yr)		
Potential Emission all combustion units (tons per year):	1.748E-04	9.987E-05	6.242E-03	1.498E-01	2.830E-04	4.161E-05	9.154E-05	1.165E-04	3.162E-05	1.748E-04	1.571E-01		

Methodology is the same as page 2 of 20 of TSD, Appendix A.

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

#### Appendix A: Emission Calculations VOC and Particulate From Surface Coating Operations and Solvent Usage (Page 1 of 6)

					Un	controlled	Potential to	Emit Cla	iss A - Line	1								
Material	Type of	Density	Weight %	Weight %	Weight %	Volume %	Volume %	Gal of Mat	Maximum	Pounds VOC	Pounds VOC	Potential	Potential	Potential	Particulate	Ib VOC	Transfer	PM Contro
(as applied)	Material	(Lb/Gal)	Volatile	Water	Organics	Water	Non-Vol	(gal/unit)	(unit/hour)	per gallon	per gallon	VOC pounds	VOC pounds	VOC tons	Potential	/gal	Efficiency	Efficiency
	Coated		(H20&		1		(solids)			of coating	of coating	per hour	per day	per year	ton/yr	solids	1	1
			Organics)							less water	-	-			-			
	•						Facility:	Sub-Assem	bly Area		•		•				•	•
Miscellaneous Coatings Applied																		
WD-40	metal	6.80	70.00%	0.00%	70.00%	0.00%	30.00%	0.010	2.000	4.76	4.76	0.10	2.28	0.42	0.04	15.87	75%	0%
SPRAYING T.P.E. DRY LUBE	metal	5.53	99.00%	0.00%	99.00%	0.00%	1.00%	0.001	2.000	5.47	5.47	0.01	0.26	0.05	0.00	547.47	75%	0%
SPRAY-ON WET LUBE	metal	6.80	80.50%	0.00%	80.50%	0.00%	16.00%	0.005	2.000	5.47	5.47	0.05	1.31	0.24	0.01	34.21	75%	0%
SPRAY-ON CUTTING OIL	metal	7.13	16.00%	0.00%	16.00%	0.00%	84.00%	0.001	2.000	1.14	1.14	0.00	0.05	0.01	0.01	1.36	75%	0%
										(metal coatin	g subtotal):	0.16	3.92	0.71	0.07			
Miscellaneous Adhesives Applied ****																		
UNIPLEX 260	wood and plastic	10.50	0.00%	0.00%	0.00%	0.00%	100.00%	0.335	2.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%	0%
PER-FECT LOK HOT METAL ADHESIVE 34-3182	wood and plastic	8.08	0.00%	0.00%	0.00%	0.00%	100.00%	0.013	2.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%	0%
SUPERTAK HIGH PERFORMANCE ADHESIVE	wood and plastic	6.40	49.38%	10.00%	39.38%	7.68%	50.63%	0.308	2.000	2.73	2.52	1.55	37.26	6.80	0.00	4.98	100%	0%
SUPERTAK TRIM ADHESIVE	wood and plastic	6.16	79.80%	10.00%	69.80%	7.40%	20.20%	0.002	2.000	4.64	4.30	0.02	0.41	0.08	0.00	21.29	100%	0%
STA-PUT II AEROSOL ADHESIVE	wood and plastic	5.93	79.93%	0.00%	79.93%	0.00%	20.07%	0.019	2.000	4.74	4.74	0.18	4.32	0.79	0.00	23.62	100%	0%
RUSSELL 676	wood and plastic	5.72	90.00%	31.70%	58.30%	21.77%	10.00%	0.137	2.000	4.26	3.33	0.91	21.93	4.00	0.00	33.35	100%	0%
STA-PUT IV H CYLINDER	wood and plastic	7.81	81.44%	0.00%	81.44%	0.00%	18.56%	0.293	2.000	6.36	6.36	3.73	89.45	16.33	0.00	34.27	100%	0%
STA-PUT IV H AEROSOL	wood and plastic	7.96	80.97%	0.00%	80.97%	0.00%	19.03%	0.054	2.000	6.45	6.45	0.70	16.71	3.05	0.00	33.87	100%	0%
ISOPROPYL ALCOHOL FOR CLEANUP	wood and plastic	6.50	99.00%	0.00%	99.00%	0.00%	0.00%	0.035	2.000	6.44	6.44	0.45	10.81	1.97	0.00	ERR	100%	0%
												7.54	180.90	33.01	0.00			
Miscellaneous Product Cleaning Materials Containing	y VOC																	
C-99 & C-100 CYCLO FAST STARTING FLUID		5.94	93.00%	0.00%	93.00%	0.00%	7.00%	4.0E-04	2.000	5.52	5.52	0.00	0.11	0.02	0.00	78.92	75%	0%
C-1 & C-5 CYCLO CARB CLEAN B-4668		6.88	100.00%	0.00%	100.00%	0.00%	0.00%	0.005	2.000	6.88	6.88	0.07	1.65	0.30	0.00	ERR	75%	0%
BRAKE PARTS & CLEANER CYCLO C-111		6.33	100.00%	20.00%	80.00%	15.20%	0.00%	0.015	2.000	5.97	5.06	0.15	3.65	0.67	0.00	ERR	75%	0%
CAMIE 22/90 CLEANER & DEGREASER		5.86	99.90%	0.00%	99.90%	0.00%	0.10%	0.040	2.000	5.85	5.85	0.47	11.24	2.05	0.00	5854.14	75%	0%
												0.69	16.64	3.04	0.00			
Miscellaneous Facility-Wide Solvent Usage																		
METHY ETHYL KETONE		6.71	100.00%	0.00%	100.00%	0.00%	0.00%	0.005	2.000	6.71	6.71	0.07	1.61	0.29	0.00	ERR	100%	0%
ACETONE *		6.61	100.00%	100.00%	0.00%	100.00%	0.00%	0.093	2.000	ERR	0.00	0.00	0.00	0.00	0.00	ERR	100%	0%
DYNASOLVE CU-5		8.83	97.00%	0.00%	97.00%	0.00%	3.00%	0.002	2.000	8.57	8.57	0.03	0.82	0.15	0.00	285.50	100%	0%
SOLVENT BLEND ETHANOL A-1		6.76	94.69%	0.00%	94.69%	0.00%	5.31%	0.071	2.000	6.40	6.40	0.91	21.81	3.98	0.00	120.55	100%	0%
												1.01	24.25	4.43	0.00			

#### Appendix A: Emission Calculations VOC and Particulate From Surface Coating Operations and Solvent Usage (Page 2 of 6)

					Un	controlled	Potential to	Emit Cla	ss A - Line	1								
Material	Substrate	Density	Weight %	Weight %	Weight %	Volume %	Volume %	Gal of Mat	Maximum	Pounds VOC	Pounds VOC	Potential	Potential	Potential	Particulate	lb VOC	Transfer	PM Contr
(as applied)	Type	(Lb/Gal)	Volatile	Water	Organics	Water	Non-Vol	(gal/unit)	(unit/hour)	per gallon	per gallon	VOC pounds		VOC tons	Potential	/gal	Efficiency	Efficience
(== =====)	Coated	(===,	(H20&				(solids)	(3)	(=,	of coating	of coating	per hour	per day	per year	ton/yr	solids		
	Journal		Organics)				(001100)			less water	or couring	pornou	por day	poi you	10.07.	001100		
			Organico)		Facilit	v: General	Class A - L	ine 1 Ruildina	and Fauing	nent Maintena	nce						1	
SPRAY ON OD100 WHITE LITL	metal,wood or fiberglass	6.66	63.00%	0.00%	63.00%	60.00%	0.00%	0.008	gal/hour	10.49	4.20	0.03	0.76	0.14	0.00	ERR	75%	0%
OSHA SAFETY YELLOW	metal, wood or fiberglass	6.39	57.90%	0.00%	57.90%	0.00%	15.00%	0.002	gal/hour	3.70	3.70	0.01	0.13	0.02	0.00	24.67	75%	0%
OGIN ON ETT TEEEON	motal, wood or liberglace	0.00	07.0070	0.0070	07.0070	0.0070	10.0070	0.002	gairnoui	0.70	0.70	0.04	0.89	0.16	0.00	21.07	10%	0,0
	1		1		-		Facilit	v: Final Finis	h Area		1							1
Miscellaneous Coatings Applied								,										
SUPER DUTY RUBBING COMPOUND	fiberglass	10.66	50.00%	0.00%	50.00%	50.00%	0.00%	0.004	2.000	10.66	5.33	0.04	1.02	0.19	0.00	ERR	100%	0%
FLAT WHITE SPRAY PAINT 280	fiberglass	5.58	65.00%	0.00%	65.00%	35.00%	0.00%	0.002	2.000	5.58	3.63	0.01	0.35	0.06	0.01	ERR	75%	0%
GM FLEET WHITE	fiberglass	9.07	46.20%	0.00%	46.20%	53.80%	0.00%	2.5E-05	2.000	9.07	4.19	0.00	0.00	0.00	0.00	ERR	75%	0%
COLONIAL WHITE SPRAY (SPRAY 'N GO ENAMEL)	fiberglass or wood	6.66	63.00%	25.00%	38.00%	37.00%	0.00%	3.2E-04	2.000	4.02	2.53	0.00	0.04	0.01	0.00	ERR	75%	0%
TOUCH 'N TONE SPRAY PAINT	metal or wood	5.58	65.00%	0.00%	65.00%	35.00%	0.00%	0.048	2.000	5.58	3.63	0.35	8.36	1.53	0.21	ERR	75%	0%
SPRAY WAY FURNITURE POLISH 811	wood	7.16	50.00%	0.00%	50.00%	50.00%	0.00%	0.016	2.000	7.16	3.58	0.11	2.75	0.50	0.13	ERR	75%	0%
BBQ BLACK	metal	6.66	80.00%	0.00%	80.00%	0.00%	50.00%	0.008	2.000	5.33	5.33	0.09	2.05	0.37	0.02	10.66	75%	0%
	1	0.00								0.00		0.61	14.57	2.66	0.36		1.070	
									(fit	perglass coatin	na subtotal):	0.06	1.42	0.26	0.01			
									1,	(wood coatin		0.46	11.14	2.03	0.33			
										(metal coatin		0.43	10.40	1.90	0.23			
Miscellaneous Product Cleaning Materials Containing	a VOC									(	.9							1
CYCLO C-31 GLASS CLEANER	1	8.33	100.00%	0.00%	100.00%	0.00%	0.00%	0.018	2.000	8.33	8.33	0.30	7.20	1.31	0.00	ERR	75%	0%
CRAZY CLEAN 031		8.39	50.00%	0.00%	50.00%	50.00%	0.00%	0.044	2.000	8.39	4.20	0.37	8.86	1.62	0.40	ERR	75%	0%
SD-20 ALL PURPOSE CLEANER		8.33	23.00%	0.00%	23.00%	77.00%	0.00%	0.008	2.000	8.33	1.92	0.03	0.74	0.13	0.11	ERR	75%	0%
C-192 MAX CLEAN ALL PURPOSE CLEANER		8.33	98.00%	88.00%	10.00%	2.00%	0.00%	0.011	2.000	0.85	0.83	0.02	0.44	0.08	0.00	ERR	75%	0%
		5.00			10.000					0.00		0.72	17.23	3.14	0.52		10,0	
Miscellaneous Facility-Wide Solvent Usage																		
SOLVENT BLEND - MINERAL SPIRITS		6.58	100.00%	0.00%	100.00%	0.00%	0.00%	0.144	2.000	6.58	6.58	1.90	45.48	8.30	0.00	ERR	100%	0%
SOLVENT BLEND - S1241		6.41	100.00%	0.00%	100.00%	0.00%	0.00%	0.102	2.000	6.41	6.41	1.31	31.38	5.73	0.00	ERR	100%	0%
SOLVENT BLEND - S0114		7.08	100.00%	0.00%	100.00%	0.00%	0.00%	0.041	2.000	7.08	7.08	0.58	13.93	2.54	0.00	ERR	100%	0%
SOLVENT BLEND - PS8022 REDUCER		7.04	100.00%	0.00%	100.00%	0.00%	0.00%	0.055	2.000	7.04	7.04	0.77	18.59	3.39	0.00	ERR	100%	0%
SOLVENT BLEND - S1381		6.59	100.00%	0.00%	100.00%	0.00%	60.00%	0.504	2.000	6.59	6.59	6.64	159.43	29.10	0.00	10.98	100%	0%
SOLVENT BLEND - ETHANOL A-1 (190)		6.76	94.69%	0.00%	94.69%	5.31%	0.00%	0.340	2.000	6.76	6.40	4.35	104.47	19.06	0.00	ERR	100%	0%
( ) ( )												15.55	373.27	68.12	0.00			
	'																	
			Total Unco	ontrolled Po	tential to E	mit from CI	ass A - Lin	e 1 Final Fin	ish Area (to	ns per year):		16.88	405.07	73.93	0.89			
	Total Uncontrolled Pote	ential to Em	it from Class	ο Δ - Lino 1 9	Sub-Assam	hly & Final	Finish Arc	see and Main	tenance (to	ne ner vearl		26.32	631.67	115.28	0.96			
	Total Gricolitioned Fote	inda to Ell	iit ii Oiii Clas	7 A - EIIIU I V	Jub-A556111	DIY & FIIIAI	i iiiiali Alt	as and Main	teriance (to	nio pei yeai).		20.32	001.07	113.20	0.30			
										12-mos Input	Control	Controlled	Controlled	Controlled	Controlled			
										Usage Limit	Efficiency	VOC lbs	VOC lbs	VOC tons	PM			
										(VOC)	(PM)	per Hour	per Day	per Year	tons/yr			
	Total Contr	rolled Pote	ntial to Emit	from Class	A Line 1 Su	b-Assembl	y Area (tor	s per year):		39.3%	0.00	9.40	225.70	< 25**	0.07			
	Total Co	ontrolled P	otential to Er	nit from Clas	ss A Line 1	Final Finis	h Area (tor	s per year):		66.2%	0.00	16.88	405.07	< 25**	0.89			
Total Controlled P	otential to Emit from Class	A Line 1 S	ıb-Assembly	& Final Fini	ish Areas	Plus Mainte	nance (tor	s per vear).				26.28	630.78	< 50.16	0.96			

#### Appendix A: Emission Calculations VOC and Particulate From Surface Coating Operations and Solvent Usage (Page 3 of 6)

				ι	Jncontrolle	d Potentia	I to Emit	Class A - Lii	ne 2 (Diese	Pushers):								
Material	Type of	Density	Weight %	Weight %	Weight %	Volume %	Volume %	Gal of Mat	Maximum	Pounds VOC	Pounds VOC	Potential	Potential	Potential	Particulate	lb VOC	Transfer	PM Contro
(as applied)	Material	(Lb/Gal)	Volatile	Water	Organics	Water	Non-Vol	(gal/unit)	(unit/hour)	per gallon	per gallon	VOC pounds	VOC pounds	VOC tons	Potential	/gal	Efficiency	Efficiency
	Coated		(H20&				(solids)			of coating	of coating	per hour	per day	per year	ton/yr	solids		
			Organics)							less water								
							Facility:	Sub-Assem	bly Area									
Miscellaneous Coatings Applied																		
WD-40	metal	6.80	70.00%	0.00%	70.00%	0.00%	30.00%	0.011	0.375	4.76	4.76	0.02	0.47	0.09	0.01	15.87	75%	0%
SPRAYING T.P.E. DRY LUBE	metal	5.53	99.00%	0.00%	99.00%	0.00%	1.00%	0.001	0.375	5.47	5.47	0.00	0.05	0.01	0.00	547.47	75%	0%
SPRAY-ON WET LUBE	metal	6.80	80.50%	0.00%	80.50%	0.00%	16.00%	0.006	0.375	5.47	5.47	0.01	0.30	0.05	0.00	34.21	75%	0%
SPRAY-ON CUTTING OIL	metal	7.13	16.00%	0.00%	16.00%	0.00%	84.00%	0.001	0.375	1.14	1.14	0.00	0.01	0.00	0.00	1.36	75%	0%
										(metal coatin	g subtotal):	0.03	0.83	0.15	0.01			
Miscellaneous Adhesives Applied ****																		
UNIPLEX 260	wood and plastic	10.50	0.00%	0.00%	0.00%	0.00%	100.00%	0.383	0.375	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%	0%
PER-FECT LOK HOT METAL ADHESIVE 34-3182	wood and plastic	8.08	0.00%	0.00%	0.00%	0.00%	100.00%	0.014	0.375	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%	0%
SUPERTAK HIGH PERFORMANCE ADHESIVE	wood and plastic	6.40	49.38%	10.00%	39.38%	7.68%	50.63%	0.352	0.375	2.73	2.52	0.33	7.98	1.46	0.00	4.98	100%	0%
SUPERTAK TRIM ADHESIVE	wood and plastic	6.16	79.80%	10.00%	69.80%	7.40%	20.20%	0.003	0.375	4.64	4.30	0.00	0.12	0.02	0.00	21.29	100%	0%
STA-PUT II AEROSOL ADHESIVE	wood and plastic	5.93	79.93%	0.00%	79.93%	0.00%	20.07%	0.022	0.375	4.74	4.74	0.04	0.94	0.17	0.00	23.62	100%	0%
RUSSELL 676	wood and plastic	5.72	90.00%	31.70%	58.30%	21.77%	10.00%	0.157	0.375	4.26	3.33	0.20	4.71	0.86	0.00	33.35	100%	0%
STA-PUT IV H CYLINDER	wood and plastic	7.81	81.44%	0.00%	81.44%	0.00%	18.56%	0.335	0.375	6.36	6.36	0.80	19.18	3.50	0.00	34.27	100%	0%
STA-PUT IV H AEROSOL	wood and plastic	7.96	80.97%	0.00%	80.97%	0.00%	19.03%	0.062	0.375	6.45	6.45	0.15	3.60	0.66	0.00	33.87	100%	0%
ISOPROPYL ALCOHOL FOR CLEANUP	wood and plastic	6.50	99.00%	0.00%	99.00%	0.00%	0.00%	0.040	0.375	6.44	6.44	0.10	2.32	0.42	0.00	ERR	100%	0%
												1.62	38.84	7.09	0.00			
Miscellaneous Product Cleaning Materials Containing	g VOC																	
C-99 & C-100 CYCLO FAST STARTING FLUID		5.94	93.00%	0.00%	93.00%	0.00%	7.00%	4.6E-04	0.375	5.52	5.52	0.00	0.02	0.00	0.00	78.92	75%	0%
C-1 & C-5 CYCLO CARB CLEAN B-4668		6.88	100.00%	0.00%	100.00%	0.00%	0.00%	0.006	0.375	6.88	6.88	0.02	0.37	0.07	0.00	ERR	75%	0%
BRAKE PARTS & CLEANER CYCLO C-111		6.33	100.00%	20.00%	80.00%	15.20%	0.00%	0.018	0.375	5.97	5.06	0.03	0.82	0.15	0.00	ERR	75%	0%
CAMIE 22/90 CLEANER & DEGREASER		5.86	99.90%	0.00%	99.90%	0.00%	0.10%	0.046	0.375	5.85	5.85	0.10	2.42	0.44	0.00	5854.14	75%	0%
												0.15	3.64	0.66	0.00			<u> </u>
Miscellaneous Facility-Wide Solvent Usage																		
METHY ETHYL KETONE		6.71	100.00%	0.00%	100.00%	0.00%	0.00%	0.005	0.375	6.71	6.71	0.01	0.30	0.06	0.00	ERR	100%	0%
ACETONE *		6.61	100.00%	100.00%	0.00%	100.00%	0.00%	0.107	0.375	ERR	0.00	0.00	0.00	0.00	0.00	ERR	100%	0%
DYNASOLVE CU-5		8.83	97.00%	0.00%	97.00%	0.00%	3.00%	0.003	0.375	8.57	8.57	0.01	0.23	0.04	0.00	285.50	100%	0%
SOLVENT BLEND ETHANOL A-1		6.76	94.69%	0.00%	94.69%	0.00%	5.31%	0.081	0.375	6.40	6.40	0.19	4.67	0.85	0.00	120.55	100%	0%
	1	1	1	I	1	1	1		l	1		0.22	5.20	0.95	0.00		I	1

#### Appendix A: Emission Calculations VOC and Particulate From Surface Coating Operations and Solvent Usage (Page 4 of 6)

Material (as applied)  Substrate (as applied)  SPRAY ON OD100 WHITE LITL metal, wood or file of the control of	10.6 5.5 9.0 pod 6.6	66 568 667 466 66 66	Weight % Volatile (H20& Organics) 63.00% 57.90%	Weight % Water 0.00% 0.00%		Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	Ib VOC /gal solids	Transfer Efficiency	PM Control Efficiency
(as applied)  Type Coated  SPRAY ON OD100 WHITE LITL  OSHA SAFETY YELLOW  Miscellaneous Coatings Applied  SUPER DUTY RUBBING COMPOUND  FLAT WHITE SPRAY PAINT 280  GM FLEET WHITE  GOLONIAL WHITE SPRAY (SPRAY'N GO ENAMEL)  TOUCH 'N TONE SPRAY PAINT  SPRAY WAY FURNITURE POLISH 811  Wood  BBQ BLACK  Miscellaneous Product Cleaning Materials Containing VOC  CYCLO C-31 GLASS CLEANER  GRAZY CLEAN 331  Miscellaneous Product Cleaning Materials Containing VOC  CYCLO C-31 GLASS CLEANER  GRAZY CLEAN 331  SD-20 ALL PURPOSE CLEANER	(Lb/d) erglass 6.6 erglass 6.3  10.1 5.5 9.0 ood 6.6 d 5.5 d 7.1	66 568 667 466 66 66	Volatile (H20& Organics) 63.00% 57.90%	Water 0.00%	Organics  Facility 63.00%	Water  y: General  60.00%	Non-Vol (solids) Class A - Li 0.00%	(gal/unit) ne 2 Building	(unit/hour)	per gallon of coating less water	per gallon	VOC pounds	VOC pounds	VOC tons	Potential	/gal		
(as applied)  Type Coated  SPRAY ON OD100 WHITE LITL  OSHA SAFETY YELLOW  Miscellaneous Coatings Applied  SUPER DUTY RUBBING COMPOUND  FLAT WHITE SPRAY PAINT 280  GM FLEET WHITE  GOLONAL WHITE SPRAY PAINT 280  TOUCH 'N TONE SPRAY PAINT  SPRAY WAY FURNITURE POLISH 811  wood  BBO BLACK  Miscellaneous Product Cleaning Materials Containing VOC  CYCLO C31 GLASS CLEANER  CRAZY CLEAN 031  Miscellaneous Product Cleaning Materials Containing VOC  CYCLO C31 GLASS CLEANER  CRAZY CLEAN 031  SD 20 ALL PURPOSE CLEANER	(Lb/d) erglass 6.6 erglass 6.3  10.1 5.5 9.0 ood 6.6 d 5.5 d 7.1	66 568 667 466 66 66	Volatile (H20& Organics) 63.00% 57.90%	Water 0.00%	Organics  Facility 63.00%	Water  y: General  60.00%	Non-Vol (solids) Class A - Li 0.00%	(gal/unit) ne 2 Building	(unit/hour)	per gallon of coating less water	per gallon	VOC pounds	VOC pounds	VOC tons	Potential	/gal		
Coated  SPRAY ON OD100 WHITE LITL	erglass 6.6 erglass 6.3 10.0 5.5 9.0 ood 6.6 d 5.5	66 8 9 5 66 8 8 6 7 4 6 6	(H20& Organics) 63.00% 57.90%	0.00%	Facility 63.00%	y: General 60.00%	(solids)  Class A - Li  0.00%	ne 2 Building	Ì	of coating less water							Lincicrity	Lincicity
SPRAY ON OD100 WHITE LITL metal,wood or fit OSHA SAFETY YELLOW metal, wood or fit Miscellaneous Coatings Applied SUPER DUTY RUBBING COMPOUND fiberglass FLAT WHITE SPRAY PAINT 280 fiberglass GM FLEET WHITE COLONAL WHITE SPRAY (SPRAY 'N GO ENAMEL) fiberglass or TOUCH N TONE SPRAY PAINT metal or we SPRAY WAY FURNITURE POLISH 811 wood BBO BLACK metal Miscellaneous Product Cleaning Materials Containing VOC CYCLO C-31 GLASS CLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER	10.6 5.5 9.0 pod 6.6 dd 5.5	66 £ 88 € 7 46 € 66	0rganics) 63.00% 57.90%		63.00%	60.00%	Class A - Li 0.00%		and Equipr	less water	or coating	pernou	perday	pci ycai	torby:			i
OSHA SAFETY YELLOW metal, wood or fi  Miscellaneous Coatings Applied  SUPER DUTY RUBBING COMPOUND fiberglass FLAT WHITE SPRAY PAINT 280 fiberglass GM FLEET WHITE COLONIAL WHITE SPRAY (SPRAY 'N GO ENAMEL) fiberglass or TOUCH 'N TONE SPRAY PAINT metal or w SPRAY WAY FURNITURE POLISH 811 wood BBO BLACK metal  Miscellaneous Product Cleaning Materials Containing CYCLO C-31 GLASS CLEANER CRAZY CLEAN 031  M20 ALL PURPOSE CLEANER	10.6 5.5 9.0 pod 6.6 dd 5.5	6 6 9 5 5 6 6 5 6 6 6 6 6 6 6 6 6 6 6 6	63.00% 57.90% 50.00%		63.00%	60.00%	0.00%		and Equipr									l .
OSHA SAFETY YELLOW metal, wood or fi  Miscellaneous Coatings Applied  SUPER DUTY RUBBING COMPOUND fiberglass FLAT WHITE SPRAY PAINT 280 fiberglass GM FLEET WHITE COLONIAL WHITE SPRAY (SPRAY 'N GO ENAMEL) fiberglass or TOUCH 'N TONE SPRAY PAINT metal or w SPRAY WAY FURNITURE POLISH 811 wood BBO BLACK metal  Miscellaneous Product Cleaning Materials Containing CYCLO C-31 GLASS CLEANER CRAZY CLEAN 031  M20 ALL PURPOSE CLEANER	10.6 5.5 9.0 pod 6.6 dd 5.5	9 5 66 5 8 6 7 4	57.90%		63.00%	60.00%	0.00%		and Equipi		200							
OSHA SAFETY YELLOW metal, wood or fi  Miscellaneous Coatings Applied SUPER DUTY RUBBING COMPOUND fiberglass FLAT WHITE SPRAY PAINT 280 fiberglass COLONAL WHITE SPRAY (SPRAY N GO ENAMEL) fiberglass or TOUCH N TONE SPRAY PAINT metal or w SPRAY WAY FURNITURE POLISH 811 wood BBQ BLACK metal Miscellaneous Product Cleaning Materials Containing VOC CYCLO C-31 GLASS CLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER	10.6 5.5 9.0 pod 6.6 dd 5.5	9 5 66 5 8 6 7 4	57.90%						gal/hour	10.49	4.20	0.01	0.23	0.04	0.00	ERR	75%	0%
Miscellaneous Coatings Applied  SUPER DUTY RUBBING COMPOUND fiberglass CAN FLEET WHITE SPRAY PAINT 280 fiberglass or TOUCH N TONE SPRAY PAINT metal or we SPRAY WAY FURNITURE POLISH 811 wood BBQ BLACK metal spray FANT metal or we Miscellaneous Product Cleaning Materials Containing VOC CYCLO C-31 GLASS CLEANER CRAZY CLEAN 031  BJ20 ALL PURPOSE CLEANER	10.6 5.5 9.0 ood 6.6 id 5.5 7.1	66 5 8 6 7 4	50.00%	0.0076	37.90%	0.0076		0.001	gal/hour	3.70	3.70	0.00	0.07	0.01	0.00	24.67	75%	0%
SUPER DUTY RUBBING COMPOUND fiberglass FLAT WHITE SPRAY PAINT 280 fiberglass GM FLEET WHITE fiberglass COLONIAL WHITE SPRAY (SPRAY 'N GO ENAMEL) fiberglass or of the colonial white SPRAY PAINT TOUCH 'N TONE SPRAY PAINT Wood BBQ BLACK metal  Miscellianeous Product Cleaning Materials Containing VOC CYCLO C-31 GLASS GLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER	5.5 9.0 pod 6.6 id 5.5 7.1	8 6 7 4 6 6			1			0.001	gai/IIoui	3.70	3.70	0.00	0.07	0.05	0.00	24.07	1370	I 078
SUPER DUTY RUBBING COMPOUND fiberglass FLAT WHITE SPRAY PAINT 280 fiberglass GM FLEET WHITE fiberglass COLONIAL WHITE SPRAY (SPRAY 'N GO ENAMEL) fiberglass or of the colonial white SPRAY PAINT TOUCH 'N TONE SPRAY PAINT Wood BBQ BLACK metal  Miscellianeous Product Cleaning Materials Containing VOC CYCLO C-31 GLASS GLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER	5.5 9.0 pod 6.6 id 5.5 7.1	8 6 7 4 6 6					Facilit	: Final Finis	h Aron			0.01	0.23	0.05	0.00			
SUPER DUTY RUBBING COMPOUND fiberglass FLAT WHITE SPRAY PAINT 280 fiberglass GM FLEET WHITE fiberglass COLONIAL WHITE SPRAY (SPRAY 'N GO ENAMEL) fiberglass or of the colonial white SPRAY PAINT TOUCH 'N TONE SPRAY PAINT Wood BBQ BLACK metal  Miscellianeous Product Cleaning Materials Containing VOC CYCLO C-31 GLASS GLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER	5.5 9.0 pod 6.6 id 5.5 7.1	8 6 7 4 6 6					r aciiri,	r. Filiai Filiis	II Alea									
FLAT WHITE SPRAY PAINT 280 fiberglass OM FLEET WHITE COLONIAL WHITE SPRAY (SPRAY 'N GO ENAMEL) fiberglass or TOUCH 'N TONE SPRAY PAINT metal or w SPRAY WAY FURNITURE POLISH 811 wood BBQ BLACK metal Miscellaneous Product Cleaning Materials Containing VOC CYCLO G-31 GLASS GLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER	5.5 9.0 pod 6.6 id 5.5 7.1	8 6 7 4 6 6		0.00%	50.00%	50.00%	0.00%	0.005	0.375	10.66	5.33	0.01	0.24	0.04	0.00	ERR	100%	0%
GM FLEET WHITE SPRAY (SPRAY 'N GO ENAMEL) fiberglass or TOUCH'N TOMES SPRAY PAINT metal or we spray Way FURNITURE POLISH 811 wood BBQ BLACK metal spray Way FURNITURE POLISH 811 wood metal spray Way FURNITURE POLISH 811 wood metal spray wood metal spray Way FURNITURE POLISH 811 wood metal spray Way FURNITURE POLISH 811 wood metal spray Way FURNITURE POLISH 811 wood wood wood wood wood wood wood wo	9.0 ood 6.6 id 5.5 7.1	7 4		0.00%	65.00%	35.00%	0.00%	0.003	0.375	5.58	3.63	0.00	0.10	0.04	0.00	ERR	75%	0%
COLONIAL WHITE SPRAY (SPRAY 'N GO ENAMEL)  TOUCH 'N TONE SPRAY PAINT  metal or we wood  BRO BLACK  Miscellianeous Product Cleaning Materials Containing VOC  CYCLO C-31 GLASS GLEANER  CRAZY CLEAN 031  SD-20 ALL PURPOSE CLEANER	ood 6.6 id 5.5 7.1	6 6	46.20%	0.00%	46.20%	53.80%	0.00%	3.0E-05	0.375	9.07	4.19	0.00	0.00	0.02	0.00	ERR	75%	0%
TOUCH N TONE SPRAY PAINT metal or wo SPRAY WAY FURNITURE POLISH 811 wood BBQ BLACK metal metal metal metal metal metal metal specified by the specified product Cleaning Materials Containing VOC CYCLO C-31 GLASS CLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER	d 5.5		63.00%	25.00%	38.00%	37.00%	0.00%	4.0E-04	0.375	4.02	2.53	0.00	0.00	0.00	0.00	ERR	75%	0%
SPRAY WAY FURNITURE POLISH 811 wood BBQ BLACK metal  Miscellaneous Product Cleaning Materials Containing VOC CYCLO C-31 GLASS CLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER	7.1	e I	65.00%	0.00%	65.00%	35.00%	0.00%	0.055	0.375	5.58	3.63	0.00	1.80	0.00	0.00	ERR	75%	0%
BBQ BLACK metal  Miscellaneous Product Cleaning Materials Containing VOC CYCLO C31 GLASS GLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER		_	50.00%	0.00%	50.00%	50.00%	0.00%	0.055	0.375	7.16	3.58	0.07	0.58	0.33	0.04	ERR	75%	0%
Miscellaneous Product Cleaning Materials Containing VOC CYCLO C-31 GLASS CLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER	0.0		80.00%	0.00%	80.00%	0.00%	50.00%	0.010	0.375	5.33	5.33	0.02	0.56	0.09	0.03	10.66	75%	0%
CYCLO C-31 GLASS CLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER		0 0	80.00%	0.00%	00.00%	0.00%	50.00%	0.010	0.375	5.33	5.33	0.02	3.20	0.09	0.01	10.00	75%	U%
CYCLO C-31 GLASS CLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER									(8)			0.13	0.35	0.06	0.00			
CYCLO C-31 GLASS CLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER		_							(TIE	erglass coatin								
CYCLO C-31 GLASS CLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER		_								(wood coating	, ,	0.10	2.38	0.44	0.07			
CYCLO C-31 GLASS CLEANER CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER										(metal coating	g subtotal):	0.09	2.27	0.42	0.05			
CRAZY CLEAN 031 SD-20 ALL PURPOSE CLEANER				0.000/												500		
SD-20 ALL PURPOSE CLEANER	8.3		100.00%	0.00%	100.00%	0.00%	0.00%	0.021	0.375	8.33	8.33	0.07	1.57	0.29	0.00	ERR	75%	0%
	8.3		50.00%	0.00%	50.00%	50.00%	0.00%	0.050	0.375	8.39	4.20	0.08	1.89	0.34	0.09	ERR	75%	0%
	8.3	_	23.00%	0.00%	23.00%	77.00%	0.00%	0.010	0.375	8.33	1.92	0.01	0.17	0.03	0.03	ERR	75%	0%
C-192 MAX CLEAN ALL PURPOSE CLEANER	8.3	3 9	98.00%	88.00%	10.00%	2.00%	0.00%	0.013	0.375	0.85	0.83	0.00	0.10	0.02	0.00	ERR	75%	0%
		_										0.16	3.73	0.68	0.11			
Miscellaneous Facility-Wide Solvent Usage																		
SOLVENT BLEND - MINERAL SPIRITS	6.5		100.00%	0.00%	100.00%	0.00%	0.00%	0.165	0.375	6.58	6.58	0.41	9.77	1.78	0.00	ERR	100%	0%
SOLVENT BLEND - S1241	6.4		100.00%	0.00%	100.00%	0.00%	0.00%	0.117	0.375	6.41	6.41	0.28	6.75	1.23	0.00	ERR	100%	0%
SOLVENT BLEND - S0114	7.0		100.00%	0.00%	100.00%	0.00%	0.00%	0.047	0.375	7.08	7.08	0.12	2.99	0.55	0.00	ERR	100%	0%
SOLVENT BLEND - PS8022 REDUCER	7.0		100.00%	0.00%	100.00%	0.00%	0.00%	0.063	0.375	7.04	7.04	0.17	3.99	0.73	0.00	ERR	100%	0%
SOLVENT BLEND - S1381	6.5	_	100.00%	0.00%	100.00%	0.00%	60.00%	0.576	0.375	6.59	6.59	1.42	34.16	6.23	0.00	10.98	100%	0%
SOLVENT BLEND - ETHANOL A-1 (190)	6.7	6 9	94.69%	0.00%	94.69%	5.31%	0.00%	0.389	0.375	6.76	6.40	0.93	22.41	4.09	0.00	ERR	100%	0%
												3.34	80.08	14.61	0.00			
		,	Total Unco	ntrolled Bet	tontial to Er	nit from Cl	acc A Line	2 Einal Ein	ich Aron (to	ns per year):		3.63	87.02	15.88	0.19			
			i Juai Gilco	ma oneu Pol	toritiai tO El	iii. ii Oiii Ci	uoo M - LIIII	- FIIIai FIII	on Alea (IO	no per year):		3.03	07.02	10.00	0.15			
Total Uncontro	ed Potential t	Emit f	from Class	A - Line 2 S	Sub-Assem	bly & Final	Finish Are	as and Main	tenance (to	ns per year):		5.66	135.81	24.79	0.21			
										12-mos Input	Control	Controlled	Controlled	Controlled	Controlled			
										Usage Limit	Efficiency	VOC lbs	VOC lbs	VOC tons	PM			
										(VOC)	(PM)	per Hour	per Day					
										(۷00)	(PIVI)	per nour	реграу	per Year	tons/yr			
Total Controlled Potential to Emit from	Class A . I inc	2 Sub-	-Assembly	& Final Fini	ish Areas, F	Plus Mainte	nance (ton	s per year):		0.00%	0.00%	5.66	135.81	24.79	0.21			
L																		

#### Appendix A: Emission Calculations VOC and Particulate From Surface Coating Operations and Solvent Usage (Page 5 of 6)

					U	ncontrolle	d Potential	to Emit C	lass C Line									
Material	Type of	Density	Weight %	Weight %	Weight %	Volume %	Volume %	Gal of Mat	Maximum	Pounds VOC	Pounds VOC	Potential	Potential	Potential	Particulate	lb VOC	Transfer	PM Contro
(as applied)	Material	(Lb/Gal)	Volatile	Water	Organics	Water	Non-Vol	(gal/unit)	(unit/hour)	per gallon	per gallon	VOC pounds	VOC pounds	VOC tons	Potential	/gal	Efficiency	Efficiency
	Coated		(H20&				(solids)			of coating	of coating	per hour	per day	per year	ton/yr	solids		
			Organics)							less water								
							Facility:	Sub-Assem	bly Area									
Miscellaneous Coatings Applied																		
WD-40	metal	6.80	70.00%	0.00%	70.00%	0.00%	30.00%	0.010	2.500	4.76	4.76	0.12	2.86	0.52	0.06	15.87	75%	0%
SPRAYING T.P.E. DRY LUBE	metal	5.53	99.00%	0.00%	99.00%	0.00%	1.00%	0.001	2.500	5.47	5.47	0.01	0.33	0.06	0.00	547.47	75%	0%
SPRAY-ON WET LUBE	metal	6.80	80.50%	0.00%	80.50%	0.00%	16.00%	0.005	2.500	5.47	5.47	0.07	1.64	0.30	0.02	34.21	75%	0%
SPRAY-ON CUTTING OIL	metal	7.13	16.00%	0.00%	16.00%	0.00%	84.00%	0.001	2.500	1.14	1.14	0.00	0.07	0.01	0.02	1.36	75%	0%
										(metal coating	g subtotal):	0.20	4.90	0.89	0.09			
Miscellaneous Adhesives Applied ****																		
UNIPLEX 260	wood and plastic	10.50	0.00%	0.00%	0.00%	0.00%	100.00%	0.335	2.500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%	0%
PER-FECT LOK HOT METAL ADHESIVE 34-3182	wood and plastic	8.08	0.00%	0.00%	0.00%	0.00%	100.00%	0.013	2.500	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%	0%
SUPERTAK HIGH PERFORMANCE ADHESIVE	wood and plastic	6.40	49.38%	10.00%	39.38%	7.68%	50.63%	0.308	2.500	2.73	2.52	1.94	46.58	8.50	0.00	4.98	100%	0%
SUPERTAK TRIM ADHESIVE	wood and plastic	6.16	79.80%	10.00%	69.80%	7.40%	20.20%	0.002	2.500	4.64	4.30	0.02	0.52	0.09	0.00	21.29	100%	0%
STA-PUT II AEROSOL ADHESIVE	wood and plastic	5.93	79.93%	0.00%	79.93%	0.00%	20.07%	0.019	2.500	4.74	4.74	0.23	5.40	0.99	0.00	23.62	100%	0%
RUSSELL 676	wood and plastic	5.72	90.00%	31.70%	58.30%	21.77%	10.00%	0.137	2.500	4.26	3.33	1.14	27.41	5.00	0.00	33.35	100%	0%
STA-PUT IV H CYLINDER	wood and plastic	7.81	81.44%	0.00%	81.44%	0.00%	18.56%	0.293	2.500	6.36	6.36	4.66	111.82	20.41	0.00	34.27	100%	0%
STA-PUT IV H AEROSOL	wood and plastic	7.96	80.97%	0.00%	80.97%	0.00%	19.03%	0.054	2.500	6.45	6.45	0.87	20.88	3.81	0.00	33.87	100%	0%
ISOPROPYL ALCOHOL FOR CLEANUP	wood and plastic	6.50	99.00%	0.00%	99.00%	0.00%	0.00%	0.035	2.500	6.44	6.44	0.56	13.51	2.47	0.00	ERR	100%	0%
												9.42	226.12	41.27	0.00			
Miscellaneous Product Cleaning Materials Containing	VOC																	
C-99 & C-100 CYCLO FAST STARTING FLUID		5.94	93.00%	0.00%	93.00%	0.00%	7.00%	4.0E-04	2.500	5.52	5.52	0.01	0.13	0.02	0.00	78.92	75%	0%
C-1 & C-5 CYCLO CARB CLEAN B-4668		6.88	100.00%	0.00%	100.00%	0.00%	0.00%	0.005	2.500	6.88	6.88	0.09	2.06	0.38	0.00	ERR	75%	0%
BRAKE PARTS & CLEANER CYCLO C-111		6.33	100.00%	20.00%	80.00%	15.20%	0.00%	0.015	2.500	5.97	5.06	0.19	4.56	0.83	0.00	ERR	75%	0%
CAMIE 22/90 CLEANER & DEGREASER		5.86	99.90%	0.00%	99.90%	0.00%	0.10%	0.040	2.500	5.85	5.85	0.59	14.05	2.56	0.00	5854.14	75%	0%
												0.87	20.81	3.80	0.00			
Miscellaneous Facility-Wide Solvent Usage																		
METHY ETHYL KETONE		6.71	100.00%	0.00%	100.00%	0.00%	0.00%	0.005	2.500	6.71	6.71	0.08	2.01	0.37	0.00	ERR	100%	0%
ACETONE *		6.61	100.00%	100.00%	0.00%	100.00%	0.00%	0.093	2.500	ERR	0.00	0.00	0.00	0.00	0.00	ERR	100%	0%
DYNASOLVE CU-5		8.83	97.00%	0.00%	97.00%	0.00%	3.00%	0.002	2.500	8.57	8.57	0.04	1.03	0.19	0.00	285.50	100%	0%
SOLVENT BLEND ETHANOL A-1		6.76	94.69%	0.00%	94.69%	0.00%	5.31%	0.071	2.500	6.40	6.40	1.14	27.27	4.98	0.00	120.55	100%	0%
												1.26	30.31	5.53	0.00			

#### Appendix A: Emission Calculations VOC and Particulate From Surface Coating Operations and Solvent Usage (Page 6 of 6)

Company Name: Four Winds International, Inc. Address City IN Zip: 701 CR 15, Elkhart, IN 46516 FESOP Renewal No.: 039-14036-00220 Reviewer: Michael Hirtler / EVP Date: 11/14/02

					ι	Jncontrolle	d Potential	to Emit C	lass C Line	,								
Material (as applied)	Substrate Type Coated	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics		Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	PM Control Efficiency
							Facility	: Undercoati	ng Area									
C-35 CYCLO RUBBERIZED UNDERCOATING	metal	9.33	100.00%	0.00%	100.00%	0.00%	0.00%	0.017	2.500	9.33	9.33	0.40	9.52	1.74	0.00	ERR	75%	0%
					F	acility: Ger	eral Class C	Building and	f Equipmen	t Maintenance								
SPRAY ON OD100 WHITE LITL	metal,wood or fiberglass	6.66	63.00%	0.00%	63.00%	60.00%	0.00%	0.015	gal/hour	10.49	4.20	0.06	1.51	0.28	0.00	ERR	75%	0%
OSHA SAFETY YELLOW	metal, wood or fiberglass	6.39	57.90%	0.00%	57.90%	0.00%	15.00%	0.003	gal/hour	3.70	3.70	0.01	0.22	0.04	0.00	24.67	75%	0%
												0.07	1.73	0.32	0.00			
					_		Facilit	y: Final Finis	h Area		I							
Miscellaneous Coatings Applied																		
SUPER DUTY RUBBING COMPOUND	fiberglass	10.66	50.00%	0.00%	50.00%	50.00%	0.00%	0.004	2.500	10.66	5.33	0.05	1.28	0.23	0.00	ERR	100%	0%
FLAT WHITE SPRAY PAINT 280	fiberglass	5.58	65.00%	0.00%	65.00%	35.00%	0.00%	0.002	2.500	5.58	3.63	0.02	0.44	0.08	0.01	ERR	75%	0%
GM FLEET WHITE	fiberglass	9.07	46.20%	0.00%	46.20%	53.80%	0.00%	2.5E-05	2.500	9.07	4.19	0.00	0.01	0.00	0.00	ERR	75%	0%
COLONIAL WHITE SPRAY (SPRAY 'N GO ENAMEL)	fiberglass or wood	6.66	63.00%	25.00%	38.00%	37.00%	0.00%	3.2E-04	2.500	4.02	2.53	0.00	0.05	0.01	0.00	ERR	75%	0%
TOUCH 'N TONE SPRAY PAINT	metal or wood	5.58	65.00%	0.00%	65.00%	35.00%	0.00%	0.048	2.500	5.58	3.63	0.44	10.45	1.91	0.26	ERR	75%	0%
SPRAY WAY FURNITURE POLISH 811	wood	7.16	50.00%	0.00%	50.00%	50.00%	0.00%	0.016	2.500	7.16	3.58	0.14	3.44	0.63	0.16	ERR	75%	0%
BBQ BLACK	metal	6.66	80.00%	0.00%	80.00%	0.00%	50.00%	0.008	2.500	5.33	5.33	0.11	2.56	0.47	0.03	10.66	75%	0%
									(6)			0.76	18.21	3.32	0.46			
									(fil	berglass coating		0.07 0.58	1.77 13.93	0.32 2.54	0.01			
										(wood coating		0.54		2.37	0.42 0.29			
Misselland Daniel Olambia Material Octobrila	- 1/00						1			(metal coatin	g subtotai):	0.54	13.00	2.37	0.29			
Miscellaneous Product Cleaning Materials Containing CYCLO C-31 GLASS CLEANER	y voc	8.33	100.00%	0.00%	100.00%	0.00%	0.00%	0.018	2.500	8.33	8.33	0.37	9.00	1.64	0.00	ERR	75%	0%
CRAZY CLEAN 031		8.39	50.00%	0.00%	50.00%	50.00%	0.00%	0.018	2.500	8.39	4.20	0.46	11.07	2.02	0.51	ERR	75%	0%
SD-20 ALL PURPOSE CLEANER		8.33	23.00%	0.00%	23.00%	77.00%	0.00%	0.008	2.500	8.33	1.92	0.46	0.92	0.17	0.51	ERR	75%	0%
C-192 MAX CLEAN ALL PURPOSE CLEANER		8.33	98.00%	88.00%	10.00%	2.00%	0.00%	0.008	2.500	0.85	0.83	0.04	0.55	0.17	0.14	ERR	75%	0%
C-192 MAX CLEAN ALL PURPOSE CLEANER		0.33	96.00%	00.00%	10.00%	2.00%	0.00%	0.011	2.500	0.65	0.63	0.02	21.54	3.93	0.65	ERR	75%	0%
Miscellaneous Facility-Wide Solvent Usage												0.50	21.04	3.53	0.03			
SOLVENT BLEND - MINERAL SPIRITS		6.58	100.00%	0.00%	100.00%	0.00%	0.00%	0.144	2.500	6.58	6.58	2.37	56.85	10.38	0.00	ERR	100%	0%
SOLVENT BLEND - S1241		6.41	100.00%	0.00%	100.00%	0.00%	0.00%	0.102	2.500	6.41	6.41	1.63	39.23	7.16	0.00	ERR	100%	0%
SOLVENT BLEND - S0114		7.08	100.00%	0.00%	100.00%	0.00%	0.00%	0.041	2.500	7.08	7.08	0.73	17.42	3.18	0.00	ERR	100%	0%
SOLVENT BLEND - PS8022 REDUCER		7.04	100.00%	0.00%	100.00%	0.00%	0.00%	0.055	2.500	7.04	7.04	0.73	23.23	4.24	0.00	ERR	100%	0%
SOLVENT BLEND - S1381		6.59	100.00%	0.00%	100.00%	0.00%	60.00%	0.504	2.500	6.59	6.59	8.30	199.28	36.37	0.00	10.98	100%	0%
SOLVENT BLEND - ETHANOL A-1 (190)		6.76	94.69%	0.00%	94.69%	5.31%	0.00%	0.340	2.500	6.76	6.40	5.44	130.58	23.83	0.00	ERR	100%	0%
												19.44	466.59	85.15	0.00			
			Total II	ncontrolled	Potential to	o Emit fron	Class C Li	ing Einal Ein	ich Aroa (te	ons per year):		21.10	506.34	92.41	1.11			
Total Unco	ontrolled Potential to Emit	from Class	C Line Sub-	Assembly &	Final Finis	sh Areas ar	nd Undercoa	ating & Main	tenance (to	ons per year):		33.32	799.72	145.95	1.20	l		
										12-mos Input	Control	Controlled	Controlled	Controlled	Controlled			
										Usage Limit	Efficiency	VOC lbs	VOC lbs	VOC tons	PM			
										(VOC)	(PM)	per Hour	per Day	per Year	tons/yr			
	Total Cor	ntrolled Po	tential to Em	it from Clas	s C Line Su	ıb-Assemb	ly Area (ton	s per year):		48.55%	0.00	11.76	282.13	< 25**	0.09			
	Total	Controlled	Potential to	Emit from C	lass C Line	Final Finis	sh Area (ton	s per year):		27.05%	0.00	21.10	506.34	< 25**	1.11			
Total Controlled Potential to Emit	from Class C Line Sub-As	sembly & F	inal Finish A	Areas, Plus I	Maintenanc	e & Under	coating (ton	s per year):				32.85	788.47	< 52.05	1.20	]		
										12-mos Input	Control	Controlled	Controlled	Controlled	Controlled			
										Usage Limit	Efficiency	VOC lbs	VOC lbs	VOC tons	PM			
										VOC	PM	per Hour	per Day	per Year	tons/yr			
										VOC	FIVI	perriodi	per Day	per real	toris/yi	1		
Tota	I Controlled Potential to Er	mit from So	urce (Class	A Line 1, Cla	ass A Line	2, & Class	C Line) (ton	s per year):		34.96%	0.00%	64.79	1555.06	< 100***	2.36			

#### Methodology:

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1-Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids) \* Transfer Efficiency

Total = Sum of Worst Coatings per booth + Sum of all solvents used

Controlled PM Emission Rate = Uncontrolled Emission Rate \* (1 - Control Efficiency)

Controlled VOC Emission Rate = Uncontrolled Emission Rate \* (1 - VOC Input Limitation)

<sup>\*</sup> Pursuant to 326 IAC 1-2-48, acetone is a nonphotochemically reactive hydrocarbon and the organic content is considered as water for compliance calculation purposes.

<sup>\*\*\*</sup> The VOC input usage at the Class A Line 1 Subassembly Area; the Class A Line 1 Finish Area; the Class C Subassembly Area; & the Class C Final Finish Area, shall be limited in each area to less than 25 tons per twelve (12) consecutive month period. The VOC input shall include, but not be limited to, sealants, bonding materials, adhesives, caulks, wood stains, paints and VOC solvents. Compliance with this limitation in each area will make the requirements of 326 IAC 8-1-6 (BACT) not applicable to that area.

<sup>\*\*\*</sup> The total combined VOC input usage at the Class A Line 1 Subassembly Area; the Class A Line 1 Final Finish Area, the Class A Line 2 Subassembly Area; the Class A Line 2 Final Finish Area; the Class A Line 2 Final Finish Area; the Class C Subassembly Area; the Class C Final Finish Area, shall be limited to less than 99.5 tons per twelve (12) consecutive month period. This VOC input usage limit is required to limit the source-wide potential to emit VOC to less than 100 tons per 12 consecutive month period. The VOC input shall include, but not be limited to, sealants, bonding materials, adhesives, caulks, wood stains, paints and VOC solvents. Compliance with this limitation shall make the requirements of 326 IAC 2-7 (Part 70) not applicable.

<sup>\*\*\*\*</sup> IDEM, OAQ, Compliance Branch, has determined that the spray application of adhesives is not considered as surface coating, pursuant to 326 IAC 6-3-1.5(5). There is no potential to emit particulate from this process due to deposition of material at the work area.

# Appendix A: Emission Calculations Hazardous Air Pollutants (HAPs) From Surface Coating Operations and Solvent Usage (page 1 of 6)

Company Name: Four Winds International, Inc.
Address City IN Zip: 701 CR 15, Elkhart, IN 46516
FESOP Renewal No.: 039-14036-00220
Reviewer: Michael Hirtler / EVP

Material	Density	Gal of Mat	Maximum	Weight %	Weight %	Weight %	Weight %					HAP Emission	n Rates (tor	ns ner vear)						
(as applied)	(Lb/Gal)	(gal/unit)	(unit/hour)	Xylene	MEK	toluene	MIBK	ethyl	glycol	methanol	hexane	Xylene	MEK	toluene	MIBK	ethyl	glycol	methanol	hexane	Total A
								benzene	ethers							benzene	ethers			HAPs
								Facility:	Sub-Assem	oly Area										
Miscellaneous Coatings Applied																				
WD-40	6.80	0.010	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPRAYING T.P.E. DRY LUBE	5.53	0.001	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPRAY-ON WET LUBE	6.80	0.005	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPRAY-ON CUTTING OIL	7.13	0.001	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
												0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous Adhesives Applied																				
UNIPLEX 260	10.50	0.335	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PER-FECT LOK HOT METAL ADHESIVE 34-3182	8.08	0.013	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUPERTAK HIGH PERFORMANCE ADHESIVE	6.40	0.308	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUPERTAK TRIM ADHESIVE	6.16	0.002	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	70.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.08
STA-PUT II AEROSOL ADHESIVE	5.93	0.019	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10
RUSSELL 676	5.72	0.137	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	35.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.40	2.40
STA-PUT IV H CYLINDER	7.81	0.293	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STA-PUT IV H AEROSOL	7.96	0.054	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ISOPROPYL ALCOHOL FOR CLEANUP	6.50	0.035	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
												0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.58	2.58
Miscellaneous Product Cleaning Materials Contai	ning VOC																			
C-99 & C-100 CYCLO FAST STARTING FLUID	5.94	4.0E-04	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-1 & C-5 CYCLO CARB CLEAN B-4668	6.88	0.005	2.000	0.00%	10.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.00	0.06
BRAKE PARTS & CLEANER CYCLO C-111	6.33	0.015	2.000	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25
CAMIE 22/90 CLEANER & DEGREASER	5.86	0.040	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
												0.00	0.03	0.25	0.00	0.03	0.00	0.00	0.00	0.31
Miscellaneous Facility-Wide Solvent Usage	•																			
METHY ETHYL KETONE	6.71	0.005	2.000	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.29
ACETONE *	6.61	0.093	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DYNASOLVE CU-5	8.83	0.002	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLVENT BLEND ETHANOL A-1	6.76	0.071	2.000	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.42
												0.00	0.29	0.00	0.42	0.00	0.00	0.00	0.00	0.71
	•	•	•				•													

#### Appendix A: Emission Calculations Hazardous Air Pollutants (HAPs) From Surface Coating Operations and Solvent Usage (Page 2 of 6)

Company Name: Four Winds International, Inc.
Address City IN Zip: 701 CR 15, Elkhart, IN 46516
FESOP Renewal No.: 039-14036-00220
Reviewer: Michael Hirtler / EVP

Pearly   Center Class   Floating   Center Class   Center Cla								Uncontrolle	u Potentiai t	O EIIIIL CIA	ass A - Line '	'									
Perilly   Control   Cont	Material	Density	Gal of Mat	Maximum	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %					HAP Emissio	n Rates (tor	s per year)		
Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: General Class A - Line 1 Buildings and Equipment Maintenance  Facility: Final Finish Area  Facility: Final Finish A	(as applied)	(Lb/Gal)	(gal/unit)	(unit/hour)	Xylene	MEK	toluene	MIBK	1,	, ,	methanol	hexane	Xylene	MEK	toluene	MIBK	,		methanol	hexane	Total A
SPRAY ON COTION WHITE LITL. 6 .68   0.005   2.000   0.00%   0.							Fac	cilitv: Genera			and Equipme	ent Maintena	nce				1 3020				
	SPRAY ON OD100 WHITE LITL	6.66	0.005	2.000	0.00%	0.00%								0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Facility	OSHA SAFETY YELLOW	6.39	0.001	2.000	25.00%	0.00%	1.00%	0.00%	4.00%	0.00%	0.00%	0.00%	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
													0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
SUPER DUTY RUBBING COMPOUND 10.66 0.004 2.000 0.00% 0.					•			•	Facilit	y: Final Finis	h Area	•	•								
FLAT WHITE SPRAY PAINT 280  5.5.8  0.002  2.000  0.00%  0.	fiscellaneous Coatings Applied																				
GMFLEET WHITE 907 2,55-05 2,000 13,00% 0,0	SUPER DUTY RUBBING COMPOUND					0.00%	0.00%						0.00		0.00	0.00	0.00	0.00	0.00		0.00
COLONAL WHITE SPRAY YNO DE NAMEL 6.66 3.2E-04 2.000 5.00% 10.00%	FLAT WHITE SPRAY PAINT 280							0.00%								0.00	0.00	0.00			0.01
TOUCH NONE SPRAY PAINT  5.88  0.048  2.000  0.00%	GM FLEET WHITE		2.5E-05	2.000	13.00%	0.00%						0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
SPRAY WAY FURNITURE POLISH 811	COLONIAL WHITE SPRAY (SPRAY 'N GO ENAMEL																0.00				0.01
BBQ BLACK 6.66 0.008 2.000 10.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00	TOUCH 'N TONE SPRAY PAINT	5.58	0.048	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
International Content   Inte	SPRAY WAY FURNITURE POLISH 811	7.16			0.00%				0.00%	0.00%		0.00%		0.00		0.00	0.00				0.00
## Access of the Control of the Cont	BBQ BLACK	6.66	0.008	2.000	10.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%									0.14
CYCLO C-31 GLASS CLEANER 8.33 0.018 2.000 0.00%													0.05	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.16
CRAY CLEAN 031 8.39 0.044 2.000 0.00% 0.00	Miscellaneous Product Cleaning Materials Contain	ning VOC																			
SD-20 ALL PURPOSE CLEANER   8.33   0.008   2.000   0.00%   0																					0.00
C-192 MAX CLEAN ALL PURPOSE CLEANER 8.33 0.011 2.000 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00																					0.00
Solvent Blend - State   Solvent Usage   Solvent Blend - State   Solvent Blend - Solvent Blend - State   Solvent Blend - State   Solvent Blend - State   Solvent Blend - State   Solvent Blend - Solvent Blend - State   Solvent Blend - State   Solvent Blend - Solvent Blen					0.0070	0.00,0	414474										0.00				
Solvent Blend - Shift   Shif	C-192 MAX CLEAN ALL PURPOSE CLEANER	8.33	0.011	2.000	0.00%	0.00%	0.00%	0.00%	0.00%	6.00%	0.00%	0.00%									
SOLVENT BLEND - MINERAL SPIRITS   6.58   0.144   2.000   0.00%   0.0													0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.09
SOLVENT BLEND - \$1241   6.41   0.102   2.000   0.00%	<i>,</i> , , , , , , , , , , , , , , , , , ,																				<del></del>
SOLVENT BLEND - S0114   7.08   0.041   2.000   10.00%   0.00%   70.00%   10.00%   0.																	0.00				
SOLVENT BLEND - PS8022 REDUCER 7.04 0.055 2.000 0.00%																					
SOLVENT BLEND - S1381 6.59 0.504 2.000 0.00% 0.0	**																				_
SOLVENT BLEND - ETHANOL A-1 (190) 6.76 0.340 2.000 0.00% 0.00																					
Total Uncontrolled Potential to Emit from Class A - Line 1 Sub-Assembly & Final Finish Area & Maintenance (tons per year):  0.25 0.00 5.87 2.27 0.00 0.68 0.25 0.00 9.33  0.30 0.00 5.99 2.27 0.00 0.77 0.25 0.00 9.59  1.27 0.00 0.77 0.25 0.00 9.59  1.28 0.39 0.30 0.30 0.77 0.25 0.00 9.59																					
Total Uncontrolled Potential to Emit from Class A - Line 1 Final Finish Area (tons per year):  0.30 0.00 5.99 2.27 0.00 0.77 0.25 0.00 9.59  Total Uncontrolled Potential to Emit from Class A - Line 1 Sub-Assembly & Final Finish Areas & Maintenance (tons per year):  0.32 0.33 6.24 2.69 0.03 0.77 0.25 2.58 13.20	SOLVENT BLEND - ETHANOL A-1 (190)	6.76	0.340	2.000	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%				_					
Total Uncontrolled Potential to Emit from Class A - Line 1 Sub-Assembly & Final Finish Areas & Maintenance (tons per year): 0.32 0.33 6.24 2.69 0.03 0.77 0.25 2.58 13.20													0.25	0.00	5.87	2.27	0.00	0.68	0.25	0.00	9.33
Total Uncontrolled Potential to Emit from Class A - Line 1 Sub-Assembly & Final Finish Areas & Maintenance (tons per year): 0.32 0.33 6.24 2.69 0.03 0.77 0.25 2.58 13.20													l								
				Total	Uncontrolled	l Potential to	Emit from C	Class A - Lin	e 1 Final Fin	ish Area (tor	is per year):		0.30	0.00	5.99	2.27	0.00	0.77	0.25	0.00	9.59
				=																	
	Tota	Uncontro					•			•			0.32	0.33	6.24	2.69	0.03	0.77 0.77	0.25 0.25	2.58 2.58	13.20 13.20

# Appendix A: Emission Calculations Hazardous Air Pollutants (HAPs) From Surface Coating Operations and Solvent Usage (page 3 of 6)

Company Name: Four Winds International, Inc.
Address City IN Zip: 701 CR 15, Elkhart, IN 46516
FESOP Renewal No.: 039-14036-00220
Reviewer: Michael Hirtler / EVP

							Uncontrolle	u Potentiai t	D EIIIIL CIR	iss A - Line 2	2 (Diesel Pus	ners)								
Material	Density	Gal of Mat	Maximum	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %					HAP Emission	n Rates (tor	ns per year)		
(as applied)	(Lb/Gal)	(gal/unit)	(unit/hour)	Xylene	MEK	toluene	MIBK	ethyl benzene	glycol ethers	methanol	hexane	Xylene	MEK	toluene	MIBK	ethyl benzene	glycol ethers	methanol	hexane	Total A
								Facility:	Sub-Assem	bly Area										
Miscellaneous Coatings Applied								, , , , , , , , , , , , , , , , , , ,		ĺ										
WD-40	6.80	0.011	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPRAYING T.P.E. DRY LUBE	5.53	0.001	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPRAY-ON WET LUBE	6.80	0.006	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPRAY-ON CUTTING OIL	7.13	0.001	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
												0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous Adhesives Applied	•																			
UNIPLEX 260	10.50	0.383	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PER-FECT LOK HOT METAL ADHESIVE 34-3182	8.08	0.014	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUPERTAK HIGH PERFORMANCE ADHESIVE	6.40	0.352	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUPERTAK TRIM ADHESIVE	6.16	0.003	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	70.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
STA-PUT II AEROSOL ADHESIVE	5.93	0.022	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
RUSSELL 676	5.72	0.157	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	35.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.52
STA-PUT IV H CYLINDER	7.81	0.335	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STA-PUT IV H AEROSOL	7.96	0.062	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ISOPROPYL ALCOHOL FOR CLEANUP	6.50	0.040	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
												0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.56
Miscellaneous Product Cleaning Materials Contain																				
C-99 & C-100 CYCLO FAST STARTING FLUID	5.94	4.6E-04	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-1 & C-5 CYCLO CARB CLEAN B-4668	6.88	0.006	0.375	0.00%	10.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.01
BRAKE PARTS & CLEANER CYCLO C-111	6.33	0.018	0.375	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.06
CAMIE 22/90 CLEANER & DEGREASER	5.86	0.046	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
												0.00	0.01	0.06	0.00	0.01	0.00	0.00	0.00	0.07
Miscellaneous Facility-Wide Solvent Usage																				
METHY ETHYL KETONE	6.71	0.005	0.375	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.06
ACETONE *	6.61	0.107	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DYNASOLVE CU-5	8.83	0.003	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLVENT BLEND ETHANOL A-1	6.76	0.081	0.375	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.09
												0.00	0.06	0.00	0.09	0.00	0.00	0.00	0.00	0.15

#### Appendix A: Emission Calculations Hazardous Air Pollutants (HAPs) From Surface Coating Operations and Solvent Usage (Page 4 of 6)

Company Name: Four Winds International, Inc.
Address City IN Zip: 701 CR 15, Elkhart, IN 46516
FESOP Renewal No.: 039-14036-00220
Reviewer: Michael Hirtler / EVP

Material	Density	Gal of Mat	Maximum	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %					HAP Emissic	n Rates (tor	ns ner vear)		
(as applied)	(Lb/Gal)	(gal/unit)	(unit/hour)	Xylene	MEK	toluene	MIBK	ethyl	glycol	methanol	hexane	Xylene	MEK	toluene	MIBK	ethyl	glycol	methanol	hexane	Total Al
, ,,	, ,	"	, ,	,				benzene	ethers			,				benzene	ethers			HAPs
						Fa	cility: Genera	al Class A - Li	ne 2 Building	and Equipm	ent Maintenai									
SPRAY ON OD100 WHITE LITL	6.66	0.006	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OSHA SAFETY YELLOW	6.39	0.002	0.375	25.00%	0.00%	1.00%	0.00%	4.00%	0.00%	0.00%	0.00%	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
												0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
								Facility	: Final Finis	h Area										
Miscellaneous Coatings Applied																				
SUPER DUTY RUBBING COMPOUND	10.66	0.005	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FLAT WHITE SPRAY PAINT 280	5.58	0.003	0.375	0.00%	0.00%	15.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GM FLEET WHITE	9.07	3.0E-05	0.375	13.00%	0.00%	0.00%	0.00%	2.62%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COLONIAL WHITE SPRAY (SPRAY 'N GO ENAMEL	6.66	4.0E-04	0.375	5.00%	10.00%	32.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOUCH 'N TONE SPRAY PAINT	5.58	0.055	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPRAY WAY FURNITURE POLISH 811	7.16	0.018	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BBQ BLACK	6.66	0.010	0.375	10.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.03
												0.01	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.04
Miscellaneous Product Cleaning Materials Contain																				
CYCLO C-31 GLASS CLEANER	8.33	0.021	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRAZY CLEAN 031	8.39	0.050	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SD-20 ALL PURPOSE CLEANER	8.33	0.010	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	8.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
C-192 MAX CLEAN ALL PURPOSE CLEANER	8.33	0.013	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	6.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
												0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.02
Miscellaneous Facility-Wide Solvent Usage																				
SOLVENT BLEND - MINERAL SPIRITS	6.58	0.165	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLVENT BLEND - S1241	6.41	0.117	0.375	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.37
SOLVENT BLEND - S0114	7.08	0.047	0.375	10.00%	0.00%	70.00%	10.00%	0.00%	0.00%	10.00%	0.00%	0.05	0.00	0.38	0.05	0.00	0.00	0.05	0.00	0.55
SOLVENT BLEND - PS8022 REDUCER	7.04	0.063	0.375	0.00%	0.00%	70.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.00	0.00	0.51	0.00	0.00	0.15	0.00	0.00	0.66
SOLVENT BLEND - S1381	6.59	0.576	0.375	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLVENT BLEND - ETHANOL A-1 (190)	6.76	0.389	0.375	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.43
						l						0.05	0.00	1.26	0.49	0.00	0.15	0.05	0.00	2.00
			<b>-</b>		. D. 4 41	F 14 . 6	N 4 ··	. 0 511 51 1	-b A (*			0.07		4.00			0.47			
			Iotal	uncontrolled	i Potential to	Emit from	Jiass A - Lin	e 2 Final Fini	sn Area (ton	s per year):	l	0.07	0.00	1.29	0.49	0.00	0.17	0.05	0.00	2.06
								Areas & Main	•			0.07	0.06	1.35	0.58	0.01	0.17	0.05	0.56	2.84
To	tal Contro	lled Potentia	I to Emit from	n Class A - L	ine 2 Sub-A	ssembly & F	inal Finish	Areas & Main	tenance (ton	s per vear):		0.07	0.06	1.35	0.58	0.01	0.17	0.05	0.56	2.84

# Appendix A: Emission Calculations Hazardous Air Pollutants (HAPs) From Surface Coating Operations and Solvent Usage (page 5 of 6)

Company Name: Four Winds International, Inc.
Address City IN Zip: 701 CR 15, Elkhart, IN 46516
FESOP Renewal No.: 039-14036-00220
Reviewer: Michael Hirtler / EVP

Material	Density	Gal of Mat	Maximum	Weight %	Weight %	Weight %	Weight %					HAP Emission	n Rates (tor	ns ner vear)						
(as applied)	(Lb/Gal)	(gal/unit)	(unit/hour)	Xylene	MEK	toluene	MIBK	ethyl	glycol	methanol	hexane	Xylene	MEK	toluene	MIBK	ethyl	glycol	methanol	hexane	Total A
								benzene	ethers							benzene	ethers			HAPs
								Facility:	Sub-Assem	oly Area										
Miscellaneous Coatings Applied	0.00	0.010	0.500	0.000/	0.000/	0.000/	0.000/	0.000/	0.000/	0.000/	0.000/									
WD-40	6.80	0.010	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPRAYING T.P.E. DRY LUBE	5.53	0.001	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPRAY-ON WET LUBE	6.80	0.005	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPRAY-ON CUTTING OIL	7.13	0.001	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
												0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous Adhesives Applied																				
UNIPLEX 260	10.50	0.335	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PER-FECT LOK HOT METAL ADHESIVE 34-3182	8.08	0.013	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUPERTAK HIGH PERFORMANCE ADHESIVE	6.40	0.308	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SUPERTAK TRIM ADHESIVE	6.16	0.002	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	70.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09
STA-PUT II AEROSOL ADHESIVE	5.93	0.019	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.12
RUSSELL 676	5.72	0.137	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	35.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	3.00
STA-PUT IV H CYLINDER	7.81	0.293	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STA-PUT IV H AEROSOL	7.96	0.054	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ISOPROPYL ALCOHOL FOR CLEANUP	6.50	0.035	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
												0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.22	3.22
Miscellaneous Product Cleaning Materials Contai	ning VOC																			
C-99 & C-100 CYCLO FAST STARTING FLUID	5.94	4.0E-04	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-1 & C-5 CYCLO CARB CLEAN B-4668	6.88	0.005	2.500	0.00%	10.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00	0.04	0.00	0.00	0.04	0.00	0.00	0.00	0.08
BRAKE PARTS & CLEANER CYCLO C-111	6.33	0.015	2.500	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.31
CAMIE 22/90 CLEANER & DEGREASER	5.86	0.040	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
												0.00	0.04	0.31	0.00	0.04	0.00	0.00	0.00	0.39
Miscellaneous Facility-Wide Solvent Usage	•																			
METHY ETHYL KETONE	6.71	0.005	2.500	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.37
ACETONE *	6.61	0.093	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DYNASOLVE CU-5	8.83	0.002	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLVENT BLEND ETHANOL A-1	6.76	0.071	2.500	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.53
												0.00	0.37	0.00	0.53	0.00	0.00	0.00	0.00	0.89
	•													1						

#### Appendix A: Emission Calculations Hazardous Air Pollutants (HAPs) From Surface Coating Operations and Solvent Usage (Page 6 of 6)

Company Name: Four Winds International, Inc. Address City IN Zip: 701 CR 15, Elkhart, IN 46516 FESOP Renewal No.: 039-14036-00220 Reviewer: Michael Hirtler / EVP

Date: 11/14/02

Material	Density	Gal of Mat	Maximum	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %	Weight %					HAP Emission	on Rates (tor	ns ner vear)		
(as applied)	(Lb/Gal)	(gal/unit)	(unit/hour)	Xylene	MEK	toluene	MIBK	ethyl	glycol	methanol	hexane	Xylene	MEK	toluene	MIBK	ethyl	glycol	methanol	hexane	Total A
								benzene	ethers							benzene	ethers			HAPs
							Facility		, -											
C-35 CYCLO RUBBERIZED UNDERCOATING	9.33	0.017	2.500	0.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.35
								Building and	<del> </del>											
SPRAY ON OD100 WHITE LITL	6.66	0.005	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OSHA SAFETY YELLOW	6.39	0.001	2.500	25.00%	0.00%	1.00%	0.00%	4.00%	0.00%	0.00%	0.00%	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
												0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
								Facilit	y: Final Finis	sh Area										
Miscellaneous Coatings Applied														<b></b>		<b>_</b>		<b></b>		<del></del>
SUPER DUTY RUBBING COMPOUND	10.66	0.004	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FLAT WHITE SPRAY PAINT 280	5.58	0.002	2.500	0.00%	0.00%	15.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02
GM FLEET WHITE	9.07	2.5E-05	2.500	13.00%	0.00%	0.00%	0.00%	2.62%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COLONIAL WHITE SPRAY (SPRAY 'N GO ENAMEL	6.66	3.2E-04	2.500	5.00%	10.00%	32.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
TOUCH 'N TONE SPRAY PAINT	5.58	0.048	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SPRAY WAY FURNITURE POLISH 811	7.16	0.016	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BBQ BLACK	6.66	0.008	2.500	10.00%	0.00%	20.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.06	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.18
												0.06	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.20
Miscellaneous Product Cleaning Materials Contain			0.500	0.000/	0.000/	0.000/	0.000/	0.000/	0.000/	0.000/	0.000/									
CYCLO C-31 GLASS CLEANER	8.33	0.018	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRAZY CLEAN 031	8.39	0.044	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SD-20 ALL PURPOSE CLEANER	8.33	0.008	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	8.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.06
C-192 MAX CLEAN ALL PURPOSE CLEANER	8.33	0.011	2.500	0.00%	0.00%	0.00%	0.00%	0.00%	6.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.06
Mi												0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.12
Miscellaneous Facility-Wide Solvent Usage	0.50	0.444	0.500	0.000/	0.000/	0.000/	0.000/	0.000/	0.000/	0.000/	0.000/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SOLVENT BLEND - MINERAL SPIRITS	6.58 6.41	0.144 0.102	2.500 2.500	0.00%	0.00%	0.00% 30.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00 2.15	0.00	0.00	0.00	0.00	0.00	0.00
SOLVENT BLEND - S1241 SOLVENT BLEND - S0114	7.08	0.102	2.500	10.00%	0.00%	70.00%	10.00%	0.00%	0.00%	10.00%	0.00%	0.00	0.00	2.15	0.00	0.00	0.00	0.00	0.00	2.15
SOLVENT BLEND - S0114 SOLVENT BLEND - PS8022 REDUCER	7.08	0.041	2.500	0.00%	0.00%	70.00%	0.00%	0.00%	20.00%	0.00%	0.00%	0.32	0.00	2.22	0.32	0.00	0.00	0.32	0.00	3.18
	6.59	0.055	2.500	0.00%						0.00%	0.00%	0.00	0.00	0.00				0.00		
SOLVENT BLEND - S1381 SOLVENT BLEND - ETHANOL A-1 (190)	6.76	0.340	2.500	0.00%	0.00%	0.00%	0.00% 10.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00 2.52	0.00	0.00	0.00	0.00	0.00 2.52
SOLVENT BLEND - ETHANOL A-T (190)	0.70	0.340	2.500	0.00%	0.00%	0.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	7.34	2.83	0.00	0.85	0.00	0.00	11.66
												0.32	0.00	7.34	2.83	0.00	0.85	0.32	0.00	11.66
				Tatal Ilma	manalla d Da	4a4ial 4a F	:4 fue us Clas	s C Final Fin	iah A (4a.			0.38	0.00	7.48	2.83	0.00	0.97	0.32	0.00	11.98
				Total Office	ontrolled Po	teritiai to Em	iit ii Oili Cias	S C Fillal Fill	isii Alea (lui	iis per year).		0.30	0.00	7.40	2.03	0.00	0.57	0.32	0.00	11.50
Total Uncontro	llad Batant	ial to Emit fo	om Class C	Sub Accomb	ly & Final Fi	inich Aross S	2. Maintonan	co and Undo	recating /to-	ne nor voer).		0.40	0.41	8.14	3.36	0.04	0.97	0.32	3.22	16.85
Total Contro										,		0.40	0.41	8.14	3.36	0.04	0.97	0.32	3.22	16.85
Total Contro	iica r otelli	iai to Linit II	om olass o		iy ox i ilial Fi	mon Areas (	. mainteilall	cc and onde	Tooling (to	no per year).		0.40	0.41	0.14	3.30	0.04	0.37	0.32	J.22	10.05
	Total	Uncontroller	d Potential to	Emit from S	Source (Clas	s Δ - l ing 1	Class A - I i	ne 2. & Class	C Line) (tor	ne nor voar).		0.78	0.80	15.73	6.62	0.08	1.91	0.63	6.36	32.90
								ne 2, & Class	-, (	,		0.78	0.80	<10	6.62	0.08	1.91	0.63	6.36	<25
	101	50111101160			Julio (Olas	C. ( - Linic I,	A - LI	L, G Olass	, c Line, (to	per year).		0.70	0.00	1 -10	0.02	0.00	1.01	0.00	0.00	

Methodology:
Uncontrolled Potential HAP Emission Rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs Limited Potential HAP Emission Rate (tons/yr) = Uncontrolled Potential HAP Emission Rate \* Coating Material Input Limit (such that single HAP emissions <10 tpy and total HAP emissions < 25 tpy)

<sup>\*</sup> Pursuant to 326 IAC 1-2-48, acetone is a nonphotochemically reactive hydrocarbon and the organic content is considered as water for compliance calculation purposes.

## Appendix A: PM Emissions Process Operations at Class A - Line 1 Subassembly (page 1 of 3)

Company Name: Four Winds International, Inc.
Address City IN Zip: 701 CR 15, Elkhart, IN 46516

FESOP Renewal No.: 039-14036-00220
Reviewer: Michael Hirtler / EVP
Date: 02/01/02

Equipment	Department	Control Device	Substrate	Cut Area	Max Length	Max Board	Maximum	Dust Per
Туре				Thickness	Cut	Thickness	Cuts Per	Hour
				Inches	Inches	Inches	Hour	Cubic Feet

Facility: Class A - Lines 1 & 2 Subassembly (Facility ID: ASA)

Woodworking & Fo	am Insulation Cutting for F	Floor Assembly						
Radial Arm Saw	Floor Assembly	Cyclone/Bag C3	Wood/Foam	0.25	12	1.5	25	0.0651
	m Insulation Cutting for R			0.20				
Band Saw	Roof/Sidewalls	Cyclone/Bag C3	Wood/Foam	0.0625	12	1.5	25	0.0163
Belt Sander	Roof/Sidewalls	Cyclone/Bag C3	Wood/Foam	0.0625	6	0.125	25	0.0007
Chop Saw	Roof/Sidewalls	Cyclone/Bag C3	Wood/Foam	0.25	8	1.5	25	0.0434
Chop Saw	Roof/Sidewalls	Cyclone/Bag C3	Wood/Foam	0.25	8	1.5	25	0.0434
Radial Arm Saw	Roof/Sidewalls	Cyclone/Bag C3	Wood/Foam	0.25	12	1.5	25	0.0651
Table Saw	Roof/Sidewalls	Cyclone/Bag C3	Wood/Foam	0.25	96	0.5	25	0.1736
Woodworking for Ca	binet/Counter-top Assemi	bly	•					
Band Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.0625	12	1.5	25	0.0163
Band Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.0625	12	1.5	25	0.0163
Belt Sander	Cabinets/Counter	Cyclone/Bag C3	Wood	0.0625	6	0.125	25	0.0007
Belt Sander	Cabinets/Counter	Cyclone/Bag C3	Wood	0.0625	6	0.125	25	0.0007
Chop Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	8	1.5	25	0.0434
Chop Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	8	1.5	25	0.0434
Chop Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	8	1.5	25	0.0434
Chop Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	8	1.5	25	0.0434
Chop Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	8	1.5	25	0.0434
Chop Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	8	1.5	25	0.0434
Chop Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	8	1.5	25	0.0434
Chop Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	8	1.5	25	0.0434
Chop Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	8	1.5	25	0.0434
Radial Arm Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	12	1.5	25	0.0651
Table Drill	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	24	0.25	25	0.0217
Table Router	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	120	0.25	25	0.1085
Table Router	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	120	0.25	25	0.1085
Table Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	96	0.5	25	0.1736
Table Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	96	0.5	25	0.1736
Table Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	96	0.5	25	0.1736
Table Saw	Cabinets/Counter	Cyclone/Bag C3	Wood	0.25	96	0.5	25	0.1736
Total Dust Generate	ed (cubic feet/hour)							1.8304
Dust Specific Gravit	у							0.2638
Percent Dust <100u								3.50%
Control Efficiency								99.00%
Dust Generated (po	unds/hour)							1.05

Potential to Emit Class A - Line 1&2 Subassembly (ASA):
---

Potenti	al Po	tential	Control	Controlled	Controlled
PM Pou	nds PN	∕l tons	Efficiency	PM Pounds	PM tons
per Da	у ре	r Year	%	per Day	per Year
25 30		1.62	99 00%	0.25	0.05

#### 326 IAC 6-3-2 Compliance Determination

The allowable PM emission rate pursuant to 326 IAC 6-3-2(e), Process Operations, for weight rates up to 60,000 lb/hr is determined using the following formula:

 $E = 4.1 * P^0.67$  where: E = allowable PM emission rate (lb/hr)

P = process weight rate (tons/hr) = 300 pounds foam insulation per hour

1460 pounds wood per hour

E = 4.1 \* ((300+1460)/2000)^0.67

E = 3.76 lb PM/hr (allowable)

Potential controlled PM: 0.01 lb PM/hr (will comply)

## Appendix A: PM Emissions Process Operations at Class A - Line 1 Subassembly (page 2 of 3)

Company Name: Four Winds International, Inc.
Address City IN Zip: 701 CR 15, Elkhart, IN 46516

FESOP Renewal No.: 039-14036-00220 Reviewer: Michael Hirtler / EVP

Date: 02/01/02

Equipment	Department	Control Device	Substrate	Cut Area	Max Length	Max Board	Maximum	Dust Per
Type				Thickness	Cut	Thickness	Cuts Per	Hour
				Inches	Inches	Inches	Hour	Cubic Feet

Facility: Class A - Line 1 Subassembly Miscellaneous Woodworking (as an Insignificant Activity)

Hand Router	Roof/Sidewall Assembly Roof/Sidewalls	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Roof/Sidewalls	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Roof/Sidewalls	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Roof/Sidewalls	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Roof/Sidewalls	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Roof/Sidewalls	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Roof/Sidewalls	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Roof/Sidewalls	None	Wood	0.25	120	0.125	5	0.010
Hand Saw	Roof/Sidewalls	None	Wood	0.125	96	1.5	5	0.052
Woodworking for I	Floor Assembly							
Hand Router	Floor Assembly	None	Wood	0.25	120	0.125	5	0.010
Hand Saw	Floor Assembly	None	Wood	0.125	96	1.5	5	0.052
Hand Saw	Floor Assembly	None	Wood	0.125	96	1.5	5	0.052
Woodworking for C	Cabinet/Counter-top Assemb	bly						
Hand Router	Cabinets/Counter	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Cabinets/Counter	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Cabinets/Counter	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Cabinets/Counter	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Cabinets/Counter	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Cabinets/Counter	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Cabinets/Counter	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Cabinets/Counter	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Cabinets/Counter	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Cabinets/Counter	None	Wood	0.25	120	0.125	5	0.010
Hand Router	Cabinets/Counter	None	Wood	0.0625	96	0.25	5	0.004
Hand Router	Cabinets/Counter	None	Wood	0.0625	96	0.25	5	0.004
Jig Saw	Cabinets/Counter	None	Wood	0.125	12	1	5	0.004
	,					<u> </u>		
Total Dust General	ted (cubic feet/hour)							0.375
								5.010

Total Dust Generated (cubic feet/hour)				0.3754
Dust Specific Gravity				0.2638
Percent Dust <100u				3.50%
Control Efficiency				0.00%
Dust Generated (pounds/hour)				0.22

Potential to Emit Class A - Line 1 Insignificant Activity:	5.19	0.95	0.00%	5.19	0.95	ı
	per Day	per Year	%	per Day	per Year	
	PM Pounds	PM tons	Efficiency	PM Pounds	PM tons	
	Potential	Potential	Control	Controlled	Controlled	

#### 326 IAC 6-3-2 Compliance Determination

The allowable PM emission rate pursuant to 326 IAC 6-3-2(e), Process Operations, for weight rates up to 60,000 lb/hr is determined using the following formula:

 $E = 4.1 * P^0.67$  where: E = allowable PM emission rate (lb/hr)

P = process weight rate (tons/hr) = 425 pounds wood per hour

E = 4.1 \* (425/2000)^0.67

= 1.45 lb PM/hr (allowable)

Potential uncontrolled PM: 0.22 lb PM/hr (will comply)

#### Appendix A: PM Emissions Process Operations at Class A - Line 1 Subassembly (page 3 of 3)

Company Name: Four Winds International, Inc.
Address City IN Zip: 701 CR 15, Elkhart, IN 46516

FESOP Renewal No.: 039-14036-00220
Reviewer: Michael Hirtler / EVP
Date: 02/01/02

Equipment	Department	Control Device	Substrate	Cut Area	Max Length	Max Board	Maximum	Dust Per
Туре				Thickness	Cut	Thickness	Cuts Per	Hour
				Inches	Inches	Inches	Hour	Cubic Feet

Facility: Wood Trimming at Final Finish (as an Insignificant Activity)

Woodworking for Final Finish Trim											
Chop Saw	Final Finish	Cyclone/Bag C3	Wood	0.25	8	1.5	25	0.0434			
Total Dust Gener	ated (cubic feet/hour)							0.0434			
Dust Specific Gravity								0.2638			
Percent Dust <10	00u							3.50%			
Control Efficiency	1							99.00%			
Dust Generated (	pounds/hour)							0.03			

Potential Potential Control Controlled Controlled PM Pounds PM tons Efficiency PM Pounds PM tons per Day per Year % per Day per Year 0.60 0.11 99.00% 0.01 0.00

Potential to Emit Class A - Line 1 Final Finish:

#### Facility: Fiberglass Machining at Subassembly Area (as an Insignificant Activity)

Fiberglass Routing	g for Roof/Sidewall Assemi	bly						
Hand Router	Roof/Sidewalls	Cyclone/Bag C4	FRP	0.125	396	0.125	1	0.0036
Hand Router	Roof/Sidewalls	Cyclone/Bag C4	FRP	0.125	396	0.125	1	0.0036
Hand Router	Roof/Sidewalls	Cyclone/Bag C4	FRP	0.125	396	0.125	1	0.0036
Hand Router	Roof/Sidewalls	Cyclone/Bag C4	FRP	0.125	396	0.125	1	0.0036
Hand Router	Roof/Sidewalls	Cyclone/Bag C4	FRP	0.125	396	0.125	1	0.0036
Hand Router	Roof/Sidewalls	Cyclone/Bag C4	FRP	0.125	396	0.125	1	0.0036
Total Dust Genera	ited (cubic feet/hour)							0.0215
Dust Specific Grav	vity							0.2638
Percent Dust <100u								3.50%
Control Efficiency								99.00%
Dust Generated (p	oounds/hour)							0.01

	Potential	Potential	Control	Controlled	Controlled
	PM Pounds	PM tons	Efficiency	PM Pounds	PM tons
	per Day	per Year	%	per Day	per Year
ine 1 Fiberglass Machining:	0.30	0.05	99.00%	0.00	0.00

Potential to Emit Class A - Line 1 Fiberglass Machining:

#### 326 IAC 6-3-2 Compliance Determination

Facility: Wood Trimming at Final Finish (as an Insignificant Activity):

The allowable PM emission rate pursuant to 326 IAC 6-3-2(e), Process Operations, for weight rates up to 60,000 lb/hr is determined using the following formula:

E =  $4.1 * P^0.67$  where: E = allowable PM emission rate (lb/hr)

P = process weight rate (tons/hr) = 10 pounds wood per hour

Pursuant to 326 IAC 6-3-2(e), for process weight rates up to 100 pounds per hour,

E = 0.551 lb PM/hr (allowable)

Potential controlled PM: 0.0003 lb PM/hr (will comply)

Facility: Fiberglass Machining at Subassembly Area (as an Insignificant Activity):

The allowable PM emission rate pursuant to 326 IAC 6-3-2(e), Process Operations, for weight rates up to 60,000 lb/hr is determined using the following formula:

 $E = 4.1 * P^0.67$  where: E = allowable PM emission rate (lb/hr)

P = process weight rate (tons/hr) = 500 pounds FRP per hour

E = 4.1 \* ((500)/2000)^0.67

E = 1.62 lb PM/hr (allowable)
Potential controlled PM: 0.0001 lb PM/hr (will comply)

#### Notes:

- 1. Calculations based on Significant Permit Revision 039-10568-00220, issued on June 8, 1999.
- 2. 100% of PM assumed equal to PM10.

Company Name: Four Winds International, Inc. Address City IN Zip: 701 CR 15, Elkhart, IN 46516

FESOP Renewal No.: 039-14036-00220

Reviewer: Michael Hirtler / EVP

Date: 02/01/02

Emission Unit	Outlet Grain	Control Device	PM Control		Potential PM E	Emission Rate	Process	326 IAC 6-3-2	Equivalent 326 IAC 6-3-2	
Description	Loading	Fan Flow Rate	Efficiency	Before Controls Before Controls After Controls We			Weight Rate	PM Emission Rate	PM Emission Rate	
	(gr/acf)	(acfm)	(%)	(lb/hr)	lb/hr) (tons/yr) (lb/hr) (tons/yr)		(lb/hr)	(lb/hr)	(tons per year)	
Class C Subassembly Area woodworking equipment										
connected to cyclone/bag dust collector	0.018	10,000	91%	17.14	75.09	1.54	6.76	1,267	3.02	13.23

#### Methodology:

Potential Uncontrolled Emissions (tons/yr) = Potential Controlled Emissions (tons/yr) = Total PM is assumed equal to PM-10.

Outlet Loading (grains/acf) \* Fan Flow Rate (acfm) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs

Outlet Loading (grains/acf) \* Fan Flow Rate (acfm) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs \* (1 - Control Efficiency)

The allowable PM emission rate pursuant to 326 IAC 6-3-2(c), Process Operations, for weight rates up to 60,000 lb/hr is determined using the following formula:

 $E = 4.1 * P^0.67$  where: E = allowable PM emission rate (lb/hr)

P = process weight rate (tons/hr)

<sup>\*</sup> As taken from the original FESOP F039-5814-00220, issued on December 9, 1996.

#### Appendix A: Welding and Thermal Cutting

Company Name: Four Winds International, Inc. Address City IN Zip: 701 CR 15, Elkhart, IN 46516

FESOP Renewal No.: 039-14036-00220 Reviewer: Michael Hirtler / EVP

Date: 02/01/02

PROCESS	Total Max. Electrode Consumption		EM	EMISSION FACTORS * (lb pollutant / lb electrode)					EMISSIONS (lb/hr)				
WELDING	(lbs/hr)		PM = PM10	Manganese	Nickel	Cobalt	Chromium	PM = PM10	Manganese	Nickel	Cobalt	Chromium	
Metal Inert Gas (E70S) - Class A -Line 1	75		5.20E-03	2.00E-04	1.00E-06	1.00E-06	1.00E-06	3.90E-01	1.50E-02	7.50E-05	7.50E-05	7.50E-05	0.02
Metal Inert Gas (E70S) - Class C	75		5.20E-03	2.00E-04	1.00E-06	1.00E-06	1.00E-06	3.90E-01	1.50E-02	7.50E-05	7.50E-05	7.50E-05	0.02
								7.80E-01	3.00E-02	1.50E-04	1.50E-04	1.50E-04	0.03
	Max. Metal Thickness Cut	Total Max. Metal Cutting Rate	EMISSIO	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)					EMISSIONS (lb/hr)				
FLAME CUTTING	(in.)	(in./minute)	PM = PM10	Manganese	Nickel	Cobalt	Chromium	PM = PM10	Manganese	Nickel	Cobalt	Chromium	
Oxyacetylene - Class C	0.375	16.67	1.62E-01	5.00E-04	1.00E-04	N/A	3.00E-04	6.08E-02	1.88E-04	3.75E-05	0.00E+00	1.13E-04	0.00
Oxyacetylene - Class A *	0.375	16.67	1.62E-01	5.00E-04	1.00E-04	N/A	3.00E-04	6.08E-02	1.88E-04	3.75E-05	0.00E+00	1.13E-04	0.00
								1.22E-01	3.75E-04	7.50E-05	0.00E+00	2.25E-04	0.00
EMISSION TOTALS - WELDING & CUTTING													
Uncontrolled Potential to Emit (lbs/hr)								0.90	0.03	0.00	0.00	0.00	0.03
Uncontrolled Potential to Emit (lbs/day)								21.64	0.73	0.01	0.00	0.01	0.75
Uncontrolled Potential to Emit (tons/year)								3.95	0.13	0.00	0.00	0.00	0.14

#### METHODOLGY

Emission Factors from AP 42 (January 1995), Chapter 12.19, Tables 12.19-1 and 12.19-2, with MIG default electrode type E70S.

Welding emissions, lb/hr: (max. lbs of electrode used/hr)(emission factor, lb. pollutant/lb. of electrode used)

Cutting emissions, lb/hr: (max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Plasma cutting emission factors are from the American Welding Society study published in Sweden (March 1994), and other flame cutting factors are from U.S.EPA's SARA Reporting Guide.

<sup>\*</sup> Maximum assumed equal to total metal cutting rate for Class C (16.67 in/min), which was taken from original FESOP 039-5814-00220, issued December 9, 1996.